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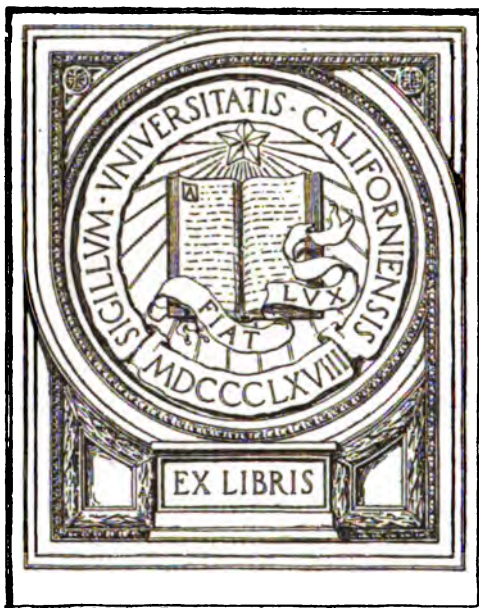
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BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXIII.
8TH. YEAR: NUMBER I
JANUARY, 1917.



BUREAU OF
ECONOMIC AND
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PRINTING OFFICE OF THE INSTITUTE
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(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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Part I: Co-operation and Association

GERMANY.

AGRICULTURAL CO-OPERATION IN THE KINGDOM OF SAXONY 1 JULY 1914 TO 30 JUNE 1915.

SOURCE:

BERICHT ÜBER DAS VIERUNDZWANZIGSTE GESCHÄFTSJAHR 1914-15 DES VERBANDES DER LANDWIRTSCHAFTLICHEN GENOSSENSCHAFTEN IM KÖNIGREICH SACHSEN, EINGETRAGENER VEREIN (*Report on the twenty-fourth year of activity, 1914-15, of the Federation of Agricultural Co-operative Societies in the Kingdom of Saxony, a Registered Union*).

§ 1. GENERAL REMARKS.

The Federation of Agricultural Co-operative Societies in the Kingdom of Saxony comprised 499 societies on 30 June 1914, namely :

- 2 central co-operative societies.
- 79 collective loan and savings banks.
- 242 savings, credit and purchase unions.
- 75 co-operative sale and purchase societies.
- 20 collective dairies.
- 6 co-operative societies for the essication of potatoes.
- 23 co-operative pasturage societies.
- 27 co-operative water-supply societies.
- 11 co-operative corn-threshing societies.
- 14 other co-operative societies.

499 co-operative societies comprising 34,779 members.

As regards the Provincial Co-operative Bank (*Landesgenossenschaftskasse*) it is noteworthy that in spite of the difficulties of the year the management were able to obtain a balance of 133,994 marks (1) on its business. If the amount of expenses and of dues for registering* the by-laws, as well as bills worth 33,931 marks, be deducted, there remains a credit balance of 41,549 marks.

The balance-sheet shows the total sum of deposits by co-operative societies to have been 11,984,424 marks as against 7,658,306 marks in the preceding year. The debts of co-operative societies amounted, on the other hand, to 2,738,276 marks as against 3,461,308 in the previous year.

The turnover was 136,212,182 marks in 1913-1914 as against 170,860,995 marks in 1914-1915.

During the year under review the Central Agricultural Co-operative Society (*Landwirtschaftliche Zentralgenossenschaft*) considerably increased its trade in cereals, dealing with 462,712 zentners (2) of the value of 4,645,949 marks, as against 313,525 zentners and 2,660,716 marks in the previous year. In round figures therefore the increase was one of 150,000 zentners. Altogether this central co-operative society dealt with 3,359,046 zentners of the value of 16,289,767 marks as against 3,249,182 zentners of the value of 14,033,613 marks in 1913-1914. The general increase was therefore one of 109,864 zentners and 2,256,154 marks, that is of 3.38 per cent. as regards quantity and of 16 per cent. as regards value.

The balance-sheet shows a net profit of 76,114 marks as against 72,252 marks in the preceding year. This central co-operative society has resources of its own of the value of 571,446 marks. Of the 499 co-operative societies which belonged at the end of 1914 to the federation 357, or 71.6 per cent., belonged to this central co-operative society. Besides the Provincial Co-operative Bank and the central institute 321 co-operative societies had part, as in the previous year, in circulating the money.

As a consequence of the considerable increase of savings deposits many co-operatives societies reduced the rate of interest on these on 1 January 1915. Others on the other hand established a balance by subscribing largely to the war loan.

In the year under review 335 co-operative societies took part in operations for the *purchase of merchandise*, the purchases being distributed among the various types of societies as follows:

	Purchase of Merchandise	
	Zentners	Marks
75 societies for purchase and sale, properly so called	2,382,815	10,624,463
37 collective savings and loan banks . .	518,987	1,968,682
220 savings, credit and purchase societies.	2,536,888	10,301,019
3 other co-operative societies	188,631	977,440
Total	5,627,321	23,871,604

(1) 1 mark of gold = about 1.1 3/4 d. at par.

(2) 1 Zentner = 110.236 lbs.

The share of the Agricultural Central Co-operative Society is 2,896,334 zentners and 11,643,818 marks ; and a comparison shows that 51 per cent. of the merchandise bought by the co-operative societies belonged to it. It is therefore evident that Saxon co-operative societies still derive a large portion of the merchandise they use from dealers.

Two hundred co-operative societies traded in cereals, namely :

	Zentners	Marks
46 co-operative purchase and sale societies, properly so called.	1,036,879	8,712,934
13 collective savings and loan banks	115,491	1,142,148
140 savings, credit & purchase associations . .	431,584	4,110,318
1 co-operative mill	31,278	267,964
Total	1,615,232	14,233,364

The *collective dairies*, the *pasturage* and the *corn-threshing co-operative societies* showed good results at the end of the year ; but the *co-operative societies for the essication of potatoes* had, on the other³ hand, to struggle against grave difficulties.

§ 2. STATISTICS OF AGRICULTURAL CO-OPERATION IN SAXONY.

As regards more particularly the *statistics of agricultural co-operation* in Saxony we report as follows :

a) *Collective Savings and Loan Banks*. — In 1914-1915 the collective savings and loan banks numbered seventy-nine and they included 6,836 members. The total turnover of these societies was in this year 53,015,426 marks, net profits amounted to 117,143 marks, the loans granted to 10,342,056 marks, and deposits to 17,391,398 marks.

The turnover was more by 3,923,062 marks than in the preceding year, which gives an average increase of 33,141 marks for one society.

The loans represent 53.4 per cent. of the general property of the co-operative societies. As compared with the preceding year they had increased by 338,851 marks.

If the average for single societies and single members be calculated the following results are obtained :

Districts	Loans		Average for a co-operative society		Average for a member	
	1914	1913	1914	1913	1914	1913
Bautzen	6,399,198	6,129,413	164,082	152,036	1,538	1,498
Chemnitz	590,360	593,488	84,337	84,784	1,081	1,150
Dresden	1,169,097	73,069	73,069	74,503	1,096	1,143
Leipzig	1,991,426	1,42,245	142,245	158,901	2,114	2,235
Zwickau	191,975	63,992	63,992	60,482	1,587	1,463
Kingdom of Saxony 1914	10,342,056	—	130,912	—	1,513	—
„ „ „ 1913	—	10,003,205	—	129,912	—	1,509

b) *Savings and Credit Societies and Societies for the Purchase of Merchandise.* — This important group includes 242 co-operative societies having 13,889 members, and a total turnover of 133,523,109 marks — which gives an average of 9,614 marks for one society —, profits amounting to 256,288 marks, and deposits amounting to 19,746,969 marks — which gives an increase of three and a third millions on the preceding year.

The average deposits of each co-operative society, member and saver in each circle are, respectively, as follows :

	Bautzen	Chemnitz	Dresden	Leipzig	Zwickau	Kingdom
For a co-operative society.	88,895	49,968	60,516	171,392	47,072	81,559
For a member.	1,419	1,205	1,234	1,919	896	1,278
„ „ saver . .	606	520	499	977	569	644

The greater part of the sums received were converted into loans, 8,182,719 marks being lent for fixed terms and 1,385,010 marks on current account. In addition merchandise to the value of 4,887,056 marks was delivered.

The net profits amounted to 276,396 marks as against 249,675 marks in the preceding year.

d) *Co-operative Purchase and Sale Societies.* — Of the seventy-five co-operative societies which belong to this group, forty-five have furnished financial data relative to the year from 1 July 1913 to 30 June 1914, the others data for 1914-1915.

These seventy-five co-operative societies had 6,562 members and a total turnover of 129,041,380 marks, which gives an average of 19,665 marks for one society. The value of the merchandise issuing from them was 19,111,237 marks and their profits amounted to 124,522 marks.

Their total circulating funds amounted to 6,019,645 marks.

e) *Co-operative Pasturage Societies.* — The twenty-two federated co-operative societies derived 144,320 marks from pasture dues and 38,246

marks from other sources during the year. Administrative expenses amounted to 99,221 marks and interest on borrowed capital to 43,793 marks. The net profits of nineteen societies were 18,169 marks and three societies closed their books showing a loss of 1,866 marks. The land and real estate of eighteen societies represented at the end of 1914 a value of 1,054,698 marks, while four societies rented their pasture land. At the same date the estimated value of the shelters on the pastures was 99,319 marks. The total turnover was 766,028 marks as against 832,538 marks in the preceding year.

Besides having their own circulating funds these co-operative societies have received help from the State, to the extent of 307,733 marks lent on pasture land exclusively and more than 661,864 marks lent on mortgages.

f) *Collective Dairies*. — During the year under review the collective dairies numbered 1,202 members, as against 1,164 in the previous year, and their turnover amounted to 75,880,973 marks as against 72,797,585 marks in the preceding year. The members furnished 72,729,741 kilogrammes (1) of milk and received 7,296,815 marks. The average price paid for a kilogramme of milk was 13.33 pfennigs (2). Receipts from the products of the cheese industry amounted to 11,363,178 marks as against 10,981,601 marks in the previous year.

g) *Co-operative Societies for the Essication of Potatoes*. — The following data have reference only to five of the six co-operative societies for the essication of potates which belong to the Saxon federation, and they concern the year from 1 July 1913 to 30 June 1914. The members numbered 996, the total turnover amounted to 3,316,746 marks and the receipts to 30,019 marks. Lands and buildings represented a value of 369,529 marks and machines one of 257,999 marks. The societies' own combined capital surpassed 300,000 marks; they used 232,835 marks of capital belonging to others, and from the State they received 143,000 marks on mortgages and 72,200 marks in loans.

h) *Other Co-operative Societies*. — The results of the year under review do not differ much from those of the preceding year in the case of the co-operative societies providing a water-supply, those undertaking the essication of corn, the co-operative mills, etc.

Those concerned with the supply of water numbered twenty-six, namely three more than in the preceding year, and comprised 1,166 members.

Those concerned with the essication of corn numbered eleven and comprised 167 members. There were fourteen other co-operative societies having different aims and numbering 1854 members. The turnover of these fourteen amounted to 17,452,437 marks, their profits to about 56,000 marks.

(1) 1 kilogramme = 2.205 lbs.

(2) 1 pfennig = 0.01 mark.

SPAIN.

THE ASSOCIATION OF THE AGRICULTURISTS OF SPAIN AND ITS WORK.

SOURCES:

NUEVO REGLAMENTO DE LA ASOCIACIÓN DE AGRICULTORES DE ESPAÑA, APROBADA EN LA JUNTA GENERAL EXTRAORDINARIA DE 15 DE MARZO DE 1912 (*New Rules of the Association of Agriculturists of Spain, approved at the extraordinary general meeting of 15 March 1912*) Imprenta de la sucesora de M. Mimusa de los Rios, Madrid, 1912.

BOLETÍN DE LA ASOCIACIÓN DE AGRICULTORES DE ESPAÑA (*Bulletin of the Association of Agriculturists of Spain*) Years 1912-1916, Madrid.

The Association of Agriculturists of Spain is perhaps, in virtue of its age and its organization, the most important institution of its kind in rural Spain. It was formed in Madrid in 1881, that is to say before the law of 1887 on associations, which gave an impulse to the movement for association in this country, was promulgated. In spite of the many obstacles which it had to overcome, in order to reach its goal, the example and the propaganda of the Association of Agriculturists caused the formation of numerous agricultural groups which were the forerunners of the existing agricultural institutions. It need not therefore astonish us that it aspired to the leadership of the social organization of Spanish agriculture, that it desired to regulate the progress and direct the efforts of this movement.

One of the chief merits of this institution is that it has endeavoured to adapt its organization to the new exigencies of rural development, and thus has been able to found for its members such enterprises as the existing credit fund and the mutual institution for insurance against hail which will soon become active. It contains therefore a promise which justifies a short description of its organization and chief activities.

§ I. THE ORGANIZATION OF THE ASSOCIATION.

The objects of the Association of the Agriculturists of Spain are, according to its rules, a) to defend and protect the rights and interests of rural producers; b) to extend the relations and the union existing among individuals of this class, as among agricultural institutions; c) to encourage the

development and progress of agricultural production in all its forms, by means of competitions, exhibitions, lectures, publications and all available methods of propaganda and instruction; *d*) to bring about and to facilitate the formation of co-operative societies for the purchase of manures, seeds, machines and foods for live stock, and for the sale and conversion of agricultural products; *e*) to found or help the foundation of co-operative agriculturists' credit institutions, institutions of mutual agricultural insurance, and other institutions tending to improve the intellectual, moral and technical equipment of the rural classes; *f*) to furnish the State, the province and the commune with all required social and agricultural information.

The members of this association belong to five classes: there are original members, subscribing members, collective members, protective and honorary members.

The original members are those who pay an entrance fee of 25 pesetas (1) and a monthly subscription of 2.50 pesetas.

The subscribing members are those who pay 1.50 pesetas a month if they live in Madrid, one peseta if they live in the country.

The collective members are the institutions who pay a monthly subscription of 1.50 pesetas if they do not comprise more than a hundred members, and add 0.25 pesetas to their subscription for every sixty or fraction of sixty members additional to a hundred they comprise, until they reach the limit of five pesetas which is the maximum subscription for a society, whatever be its membership. Collective members who are grouped pay a subscription equivalent to the sum of their individual subscriptions or a sum as to which there has been a common agreement.

Persons who have made donations to the association of at least 500 pesetas may be nominated honorary members, as may any who have rendered the association a distinguished service.

Only an application for membership and the consent of the association's council are necessary to admission (2). All members, to whatever class they belong, have the same rights and obligations.

The members have a right to the association's support in any appeal they make to the central, provincial or municipal administration, if such appeal be recognized as well founded and as consistent with the general interests of agriculture. They may buy the seeds, plants, animals and machines and all the other agricultural wares with which the association is

(1) 1 peseta = $9 \frac{3}{5}$ d. at par.

(2) At present the association has 742 members, distributed as follows: 2 protective members, 68 honorary members, 50 original members, 450 subscribing members and 109 collective members. Among the collective members are some important institutions, as the *Sindicato de Política rural* of Calera which has 2,321 members, the *Fomento agrícola de Andalucía* which has 2,900 members, the *Comunidad de Labradores* of Villareal which has 4,578 members, the federations of the Catholic agricultural syndicates of La Rioja and Palencia which comprise, respectively, 113 and 110 syndicates, and others.

supplied in their interest, at the most advantageous prices possible ; may avail themselves of all the association's existing and future enterprise; may freely receive all the publications issued by the association at its own cost, unless the council decide to place on these a price, which shall be as near as possible to cost price ; and finally they may use the association's reading-room and library.

Members are obliged to pay the subscription incident in the class to which they belong. If they neglect to do so three times successively they will be considered to have resigned but will still be liable for the omitted subscriptions. They are further obliged to discharge all commissions and trusts confided to them, unless they have a justifiable excuse for not fulfilling this duty.

Single and collective members and the groups of these may, if they live in the same district or province, unite to form an affiliated delegation of the society which will forward the local social and agricultural interests. With this aim such delegations will be able to found workmen's clubs which will possess libraries and reading-rooms, and will do all that is possible to strengthen the comradeship of their members, to facilitate the exchange of ideas and to disseminate useful knowledge. These delegations will moreover give an impulse to the formation of local agronomic laboratories and museums, with the official help of other and analogous institutions. They are finally the connecting link between the members and the association at Madrid, to which they should remit a report of their work every three years.

The association's property is constituted by the members' subscriptions, by donations and by any grants which it may receive. In the case of its dissolution its available resources and the value of its moveable property will be assigned by the council to some object covered by the association's general aims, the amount necessary to meet its debts being deducted.

The association is administered by a general meeting and an administrative council. The ordinary general meetings are held annually in the first fortnight in May in order to approve the council's report of its activity, to examine the accounts for the preceding year, to determine the budget for the coming year, and to deliberate on proposals with a view to realizing the association's general aims.

The administrative council is composed of a chairman, six vice-chairmen, a general secretary, two assistant secretaries, a treasurer, a vice-treasurer, an accountant, a librarian-archivist and fifty voting members. The chairman is the president of the association, is elected for six years and may be re-elected. Half the other offices become vacant every three years, in order of the seniority of the officials who are indefinitely eligible for re-election. Offices in the council are honorary and unpaid. Officials

(1) In 1915-1916 members' subscriptions amounted to 13,487 pesetas and grants to 8,500 pesetas.

must be chosen from the number of original members who undertake to pay a monthly subscription throughout their term of office.

The council represents the association officially and manages and administers its affairs in respect of all its engagements and of its various aims.

§ 2. THE SOCIETY'S ENTERPRISE ON BEHALF OF ITS MEMBERS.

The association conducts various enterprises in pursuit of its aims, in order to meet the social, technical and economic needs of its members. Some of these enterprises have the general character common to all institutions of this type. Thus members' appeals and requests are dealt with and supported; activity is guided towards social ends and the end of co-operation; and the sale and purchase of goods useful to agriculture and stock farming is practised, as are the sale and purchase of machines and implements. Other forms of enterprise, which in practice have great importance, need a special organization. They are the credit fund, the centre for dealing with farmers' contracts, and the office of technical, agronomic and legal advice. We will briefly examine these special enterprises.

Credit Fund. — This is the most recent enterprise of the society, having been constituted only on 31 March 1916, but it is none the less the most important hitherto established.

It was formed in response to the urgent need of Spanish agriculture for capital, a need which grew daily and which was felt with exceptional intensity owing to the European war. The war and the resultant exceptional situation of home and foreign trade have made provisioning a problem in Spain, a problem which has to be solved by an increased home production. The archaic and defective character of most of the existing systems of agriculture and the fact that agriculture is not industrialized have become apparent, and these conditions are due to the insufficiency or the total lack of capital.

It cannot be denied that since 1916 almost all districts of Spain have come to be provided with agricultural syndicates who have worked to ameliorate the position by means of rural funds. But in most cases these attempts did not meet with the desired success, in some they have completely failed; for the banks were suspicious of them and their guarantees were not always such as to inspire confidence. The need was therefore felt of a national institution which should not only afford agricultural credit but should also act as intermediary between the rural groups and the credit establishments. It was to supply this need that the Association of the Agriculturists of Spain, having first come to an agreement with the Bank of Spain, formed its credit fund.

This fund is intended: 1) to be an intermediary, connecting the capital available in urban centres with agricultural industries; 2) to cause the formation and development of local rural funds; 3) to furnish the

societies forming these on economical terms with the resources they need in order to begin their activities; 4) to regulate the movement and employment of the capital of associated institutions destined to afford agricultural credit, by providing for its investment in the case of some societies and rendering it available for others; and 5) generally to study conditions favourable to the development of agricultural credit in the country.

The chief transactions of the fund may be classified as follows :

- a) the granting of limited credit to agricultural institutions enrolled as adherent to the association ;
- b) the acceptance of savings deposits ;
- c) the opening of current accounts bearing interest ;
- d) the granting of loans on security.

Agricultural institutions which have adhered to the Association of the Agriculturists of Spain will enjoy a credit to be carefully fixed by the managers of the fund, in accordance with the solvency of their members having collective liability, and especially in accordance with their importance to social agricultural enterprise. Institutions which have obtained credit of this description will undertake : 1) to give the association a commercial guarantee signed by three members of the institution chosen for this purpose among those having an open account ; 2) to remit to the institution a quarterly account of business done ; 3) to allow any inspection of books and accounts which the association or its delegates may make, whenever such inspection may be considered useful.

Such credit once granted, the institutions may circulate the amount accruing to them by bills on the association expiring in one year, each having a maximum value of 20 per cent. of the balance of credit, or by any other commercial instrument chosen by the managers. Sums withdrawn from credit accounts will bear a fixed annual interest of from 3 $\frac{1}{2}$ to 6 per cent. The capital in shares of the Credit Fund is variable. It has been fixed initially at a minimum of 250,000 pesetas, represented by 500 contributions of 500 pesetas each. At first and for the first five years of the fund's activity these contributions will be exacted as parts of a foundation fund, and will be entirely assigned to the operations of the societies. They will gradually be converted into shares. This share capital may be subscribed, in whole or part, by means of the personal acceptance of pecuniary and individual responsibility for the discharge of the fund's obligations. The members will be collectively liable for these contributions which will be equivalent to the foundation contributions paid in specie.

The subscribed share capital of the fund surpassed from the outset its initial minimum, for contributions amounting to 497,500 pesetas were received at the time of foundation. Subscriptions have since continued and in May 1916 their amount was 614,000 pesetas.

Since the fund has existed only for some months, data as to its working and development cannot be obtained ; but it may be taken to have rendered great service to the individual as to the collective members of the association and to agriculturists generally.

Centre for Farmers' Contracts. — Hitherto one of the greatest obstacles in the way of the investment and use of capital in agricultural industries has been the difficulty of acquiring and selling rural property in Spain. A very capable agency was necessary to determine the accuracy of the facts indicated by lists of offers.

The intermediary agents responsible for the sale and letting of rural properties merely supply the information given to them by the proprietors.

The cost of such work to the seller is excessive when the transaction is important. Many agriculturists, very variously situated, asked the association to form for them a special centre for contracts of purchase and sale, which should render constantly available guarantees of the description of properties to be sold, and of the circumstances attendant on sale. In November 1915 the association therefore founded an office for the purchase, sale and letting of rural properties, on the following bases :

a) A right to use the office will belong only to members, whether individuals or societies, of the Association of the Agriculturists of Spain.

b) The association will supply detailed notes as to properties for sale or to let, with photographs and any other necessary papers, and will guarantee the accuracy of data contained in the offer, on the responsibility of its technical expert.

c) The association keeps a register of offers and one of demands. To make an entry in the former it is necessary : 1) to belong to the association, being either personally enrolled in one of its classes or the adherent of a society which is among its collective members ; 2) to pay the fee, fixed at 100 pesetas, which covers the travelling and maintenance costs of the expert who inspects properties, and the cost of obtaining photographs, verifying data, etc. ; 3) to apply to the association and facilitate the work entailed by such verification.

d) The association's technical expert guarantees by his signature the accuracy of the data supplied as to the quality of lands, the kind of crops they bear, means of communication, buildings, live stock, implements and machines, etc., but does not guarantee the area unless he receive plans which allow him to investigate it on the spot. Further he is not responsible for the price a landowner may ask, this point being left entirely to the seller's discretion.

e) When once any transaction has been completed neither the seller nor the buyer will be in any way liable to make any payment.

f) Offers and demands will be advertised in the association's bulletin, in order that all members may become aware of them.

Technical-Agronomic and Legal Advice. — The association has placed at the service of its members the offices of persons especially competent in these two departments, a technical and a legal adviser, both of whom are paid by itself. It is their duty to answer the questions of members on economic, technical, legal and social points.

Legal advice is given quite freely. Technical advice is of different kinds, as follows :

a) It is given quite freely to members. They benefit thus by con-

sultations, either verbal or by correspondence, as to agriculture and rural industries; such service being looked upon as agricultural instruction or as having a general character, and including lectures and short and practical courses of instruction, etc.

b) The association offers the free services of its expert, but the members are responsible for his travelling expenses and honoraria and for the payment of any assistants he may have. Under this provision, schemes for farming are drawn up, the cost being limited to 25,000 pesetas; lands are valued, when they have already been surveyed, the cost being limited to 5,000 pesetas; buildings are valued where no survey or measuring is necessary, the cost being limited to 5,000 pesetas; and permanent improvements are valued, as are the disposition of water with a view to irrigation, enclosures, farming roads, etc., the cost being limited to 2,000 pesetas.

c) For 33.33 per cent. of their total cost the association supplies services other than those which have been mentioned: it will thus survey lands, make plans and undertake other business.

According to the association's last report legal and technical advice was given in eighty-six and in fifty-four cases, respectively, and there were two thousand legal and as many technical verbal consultations.

WEST INDIES

CO-OPERATION IN ANTIGUA (1): AN OBJECT LESSON.

By W. R. DUNLOP,

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One of the most striking features of social and economic interest in Antigua — in fact in the whole of the West Indies — is the strong tendency in that island towards agricultural co-operation. The tendency there is much stronger than in any other West Indian island, and the reason for it is not difficult to find: Antigua has known to a greater extent than the other islands what adversity means. Subject to severe droughts and possessing in any case a limited rainfall on account of the island's topography, Antigua has experienced bad years. Furthermore this island has been largely dependent upon one industry — sugar production; and the low prices that have ruled for this product before the war and the relatively high cost of production have rendered it absolutely necessary to adopt economical methods.

The cumulative result has been to engender in the minds of planters a sympathetic attitude towards co-operation and the application of science, such as does not exist to the same extent elsewhere. This is shown by the close relationship that exists between the Department of Agriculture and the Agricultural and Commercial Society, and by the energetic and progressive work effected by both of these bodies for many years past.

The greatest and first example shown by Antigua in connection with the value of combination is to be found in the Antigua (Gunthorpes) Central Sugar Factory. The history of this factory has been dealt with in the West Indian Bulletin on several occasions by Dr. Francis Watts, C. M. G., who was largely responsible for its establishment. Suffice it to say that it had its origin in 1903 in a series of agreements between a group of owners of sugar estates and a company formed in London. It was arranged that the contracting proprietors should receive a first payment on their canes with a division of profits at the end of each season. The scheme was supported by the government to the extent of what now amounts to a free grant of £ 15,000. The

(1) Written from information in the files of the Imperial Department of Agriculture for the West Indies by direction of the Imperial Commissioner.

factory has made steady growth and in 1919 the original contractors may reasonably expect the distribution amongst them of shares which represent one half of the factory.

But besides benefiting the estate owners of Antigua, the central factory has been of advantage to the peasantry. Both Gunthorpes Central Factory and Bendals Factory entered into an agreement to purchase peasants' canes, and to facilitate the growing of canes and other crops; the government of Antigua reserved for peasants and rented on easy terms a considerable acreage of land.

Thus the Antigua factory besides being a financial success is an object lesson of considerable educational value. Above all it is a concrete argument in favour of the extension of the British sugar industry within the empire.

From the point of view of financial and economic importance the Antigua factory just referred to stands alone. But there have been during the past few years co-operative movements which seem to indicate more forcibly the co-operative feeling in the presidency. Such a movement was that started in 1913 to form an Onion Growers' Association. For years Antigua had been producing small quantities of onions of a very satisfactory kind and it was felt that the island possessed opportunities for development in this direction. Such opportunities lay chiefly in the possibility to supply the New York and Canadian markets before the Bermuda and other crops came in, and to establish an intercolonial trade with the more thickly populated islands, like Barbados, in the West Indies.

In 1913, an association was formally established. A central grading and packing house was arranged for, and it was agreed that the onion crops of members should be marketed on a co-operative basis through the association, a first payment of 1 c. per lb. being paid on delivery, followed by a distribution of the surplus profits. Agents were appointed in the different markets and a system of cable advices introduced. It was made known that the association's mark on each crate was a guarantee that the produce was sound, properly graded and packed. During the season 1913-14 the total weight of onions purchased by the association was 42,799 lbs.; in 1914-15 it rose to 186,198 lbs. or nearly four times the amount for the previous year. Total payment amounted to £588 or 1.5 c. per lb. The association has now established a firm connection in New York and in the intercolonial markets, and Antigua onions are becoming known, and justly so, as high class and uniform produce. It may be added as a fact of agricultural interest that in Antigua large quantities of onions are grown as a catch crop with sugar cane. Where this is done the cost of production is greatly reduced.

The success of the Onion Growers' Association has no doubt been partly responsible for those further co-operative movements in Antigua during the present year in connection with the formation of Cotton and of Lime-Growers' Associations, respectively. The Cotton Growers' Association which has now been formed, really originated in a resolution at the recent West Indian Cotton Conference held in St. Kitts during March 1916. The association includes in its membership all the principal cotton growers in

the island. There is a committee of management which has full power to deal with all matters affecting the cotton industry of the island. The association is affiliated to the Antigua Agricultural and Commercial Society and to the Antigua Onion Growers' Association, but this does not imply general distribution of responsibilities.

The Lime Growers' Association, which is at the present time in process of formation, has, it appears, for its principal object, the establishment of a small but profitable green lime trade with New York, supplementary to that of Dominica which has assumed big dimensions of recent years. Antigua, it is supposed, profiting by the experiences of Dominica and guided by her own knowledge of the value of combined action, intends to establish a central grading depot and to make beforehand, if possible, special arrangements in regard to freight facilities. While this is commendable, it is a question whether the production of limes in Antigua will ever attain large proportions.

The present account of co-operation in Antigua would not be complete without some reference to the Indian corn or maize industry of that island. It had been felt for some time that the West Indian islands should produce more corn and import less. Antigua, as might be expected, was the first to lead the way to giving effect to this idea. The principal difficulty was that, to keep, corn must be dried. This would necessitate the establishment of a kiln-drying plant, and this the Antigua government decided to do. In May 1914 the establishment was opened, its efficiency having been previously demonstrated. Antigua kiln-dried corn had been found to be as good if not better than the imported American product. The terms on which local deliveries are accepted by the granary are as follows : (1) the co-operative plan whereby a first payment of 2s. 6d. per bushel of shelled grain is made to growers, to be followed by a distribution of the surplus profits of the undertaking after paying all expenses and deducting 25 per cent. as the profit of the granary ; (2) the purchase of corn for cash at the rate of 3s. 6d. per bushel of shelled grain ; (3) the kiln-drying of corn for which a charge not exceeding 6d. per bushel is made.

Arrangements were made later for the erection of a meal-making machine.

The effect of the establishment of this granary was to increase largely the area under Indian corn in the island. It cannot be said, however, that so far the granary has been a financial success, nor is it likely to be until corn is produced in large quantities in excess of the immediate local requirements. At present it is in the nature of a government insurance of corn growing and from that point of view should at least inspire confidence.

In connection with corn growing it may be noted that during the present year an attempt to encourage the industry was made by holding a maize show. This function was highly successful and may be expected to have the desired result.

In concluding this review of events in Antigua, we may the more appreciate their importance by considering for a moment their external as part from their internal effects. The Antigua Sugar Factory was distinctly

a pioneer or experimental project. Its promotion involved heavy responsibilities on the part of the originators. It proved a success, however, with the result that a few years after its establishment another and similar factory was erected in the neighbouring island of St. Kitts. These factories in their turn have served to encourage greater centralization of recent years in Barbados.

Turning to the Antigua Onion Growers' Association we are able to record a most striking external effect. Last year an affiliated association was formed in Montserrat and a similar one in the Virgin Islands, while Nevis, if it has not an association, is endeavouring to develop its onion industry on similar co-operative lines to those followed in Antigua.

It will be seen therefore that a great deal of importance attaches to the study of the economic conditions obtaining in Antigua. It is an island which, though its prospects now are good, has been subject to adversities; but combined action in the right direction has won. Even the fortunes of the most flourishing colonies may suddenly take a turn in the wrong direction — it may be through unavoidable causes or from unpreparedness to meet avoidable ones: in any case co-operation in Antigua provides a useful object lesson that should not be neglected even by the most affluent of agricultural communities.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

DENMARK.

THE GENERAL UNION OF CO-OPERATIVE CONSUMERS' ASSOCIATIONS IN 1915 (1).

Following on our previous remarks regarding co-operative consumers' societies in Denmark we give the essential results of the activity in 1915 of the *General Union* of these societies.

On 31 December 1914, 1,407 associations — almost all of those existing in Denmark — belonged to the *General Union*. Their members numbered 219,492.

A year later, on 31 December 1915, eighty-one associations, numbering 12,636 members, had acceded to the union. The following figures show the progress of the movement since 1896.

	Number of Associations belonging to the Union	Number of their Members	Amount of Turnover in Millions of crowns (2)
1896	310	—	4.2
1901	684	90,972	13.5
1903	852	115,872	19.8
1905	1,029	143,031	26.3
1907	1,189	168,696	36.4
1909	1,224	173,808	41.7
1911	1,286	181,326	48.8
1913	1,359	194,337	62.0
1914	1,407	219,492	69.6
1915	1,488	232,128	71.5

The reserve funds of the associations which were 350,000 crowns on 31 December 1901, amounted on 31 December 1905 to 1,100,000 crowns; on 31 December 1910 to 2,775,000 crowns; in 1912 to 3,657,000 crowns; in 1913 to 3,987,000 crowns; in 1914 to 4,276,000 crowns; on 31 December 1915 to 4,583,000 crowns.

(1) Note sent by our correspondent in Copenhagen.

(2) 1 crown = about 15 s 1 1/4 d at par.

The General Union is not concerned only with trade but devotes also considerable activity to industry. The following figures indicate its operations in its different spheres of action.

Commercial Activity.

(Value of operations in millions of crowns).

	1915	1914	1913
Section for colonial provisions	50.4	38.5	35.4
" " manufactures	5.2	4.9	4.6
" " edge-tools	5.0	4.2	3.7
" " grains	4.1	2.7	2.4
" " trade in wood	0.2	0.2	0.2
" " large merchandise	0.6	0.4	0.3
" " wines	0.6	0.3	0.3
" " packing	6.0	6.0	5.1
" " cycles	0.3	0.3	0.2
Total	72.4	57.5	52.2

Industrial Activity.

(Value of operations in millions of crowns).

	1915	1914	1913
Roasting of coffee	2.9	2.8	2.7
Manufacture of chocolate	0.8	0.7	0.6
" " sugar	0.4	0.3	0.3
" " tobacco & cigars	1.0	0.8	0.8
" " ropes	0.6	0.5	0.4
" " soap	1.1	1.0	0.9
" " chemicals (technical)	0.2	0.2	0.2
" " knitting	0.2	0.2	0.2
" " margarine	6.1	4.7	3.2
Spice mills	0.4	0.4	0.3
Section for corn	0.2	0.2	0.2
Packing	1.1	0.8	—
Total	15.0	12.6	9.8

It will be seen that of late years the increase in the value of operations has been distributed over almost all branches of activity, and that the profits,

which in 1912 were 2,846,000 crowns, rose in 1913 to 3,048,000 crowns, in 1914 to 3,825,000 crowns, and in 1915 to 5,005,000 crowns. In terms of the percentage of the figure representing the business done, that is of the value of the purchases giving a right to a share of dividends, the associations belonging to the union received 5.5 per cent. in 1912, 5.5 per cent. in 1913, 6 per cent. in 1914, and 7 per cent in 1915.

We will conclude by reproducing the balance-sheets of the union, dated 1 January 1916, 1915 and 1914.

Balance Sheets of the General Union.

(in millions of crowns).

Credit.

	1916	1915	1914
Stock of merchandise	11.09	7.35	6.76
In hand.	0.10	0.07	0.06
Inventory	0.32	0.39	0.29
Properties	4.90	4.63	4.20
Credit	9.17	8.30	8.37
Total	25.58	20.74	19.68

Debit.

	1916	1915	1914
Co-operative societies' account	0.93	0.80	0.78
Reserve funds'	4.58	4.27	3.99
Dividends	0.23	0.18	0.15
Debit for loans	1.99	2.34	2.90
Insurance (against lowering of prices)	0.57	0.27	0.20
Reduction in value of buildings	3.50	3.50	3.00
Insurance account	0.10	0.10	0.10
Insurance renewal account	0.50	0.50	0.50
Insurance account (against disturbance of activity)	0.30	0.10	—
Loans on properties	0.99	1.00	1.32
Various creditors	6.37	3.81	3.65
Carried over from last year	0.52	0.04	0.04
Net excess	5.00	3.83	3.05
Total	25.58	20.74	19.68

GERMANY.

HOUSEWIVES' AGRICULTURAL ORGANIZATIONS AND THEIR ACTIVITY. —
Boehm, Elisabeth, in *Blätter für Genossenschaftswesen*, Berlin, 16 September 1916.

The aim of the first agricultural association of housewives in East Prussia, which was founded nearly twenty years ago and composed of town and country members, was to inculcate in its members the principles of a sound economic education, and to institute an office for the sale to town housewives of fresh country provisions. Countrywomen were thus enabled to sell their produce more profitably than heretofore while the large towns found themselves more amply and more economically provided with foodstuffs.

The selling offices further affect agriculture in that they induce those interested in it to increase the cultivated area and to employ the soil scientifically, and in that they allow a large sale of small quantities of vegetables and fruit produced on distant farms.

At present there is at least one housewives' association in each district and a selling office in every small town. For the whole province the turnover of these organizations amounted in 1915 to 1,330,000 marks (1). There are also twenty associations in West Prussia, thirteen in Pomerania, twelve in Silesia and as many in Schleswig-Holstein and in the province of Saxony. These have, following the example of East Prussia, grouped themselves in provincial federations which have adhered to a Prussian provincial federation. In all the other Prussian provinces and German States a series of these associations are found, so that there are altogether more than 120 of them founded on similar bases and working as free societies. This free form seems to suit the organizing activity of women better than the co-operative form, which invariably exacts a larger measure of work and of responsibility than housewives are able to supply. In spite of the unsuccessful experience at Hildesheim of a housewives' association organized as a co-operative society, new attempts in this direction have recently been made in Hanover, which is the province *par excellence* of co-operative organization. At Hanover itself, at Lünebourg and at Osnabrück housewives' associations and selling offices, which are co-operative in form, have been instituted.

The financial results of the enterprise cannot as yet be estimated. It is however certain that when several selling offices are established the turnover of the smallest towns increases, while on the other hand the general costs diminish. The free associations at first deduct 10 per cent. for general costs, but subsequently often effect a reduction to 8 per cent. It is found that the latter percentage will allow the maintenance of itinerant instructors, and the institution of establishments for making jams and pre-

(1) 1 mark = about 11 3/4 d. at par.

serves and of others for hatching eggs, as well as grants to social enterprises and to the daughters of poor members for their instruction in domestic economy.

In their monthly meetings the town and country members discuss prices together, and thus for the first time townswomen are able to participate in fixing prices. The shops of the associations have distinguished themselves during the war by maintaining fair prices, often lower than those which obtain in markets.

ITALY.

1. AGRICULTURAL CO-OPERATION AND SOCIAL ASSISTANCE OF PEASANTS.— *La Cooperazione Italiana*, Milan, No. 1212, 6 October 1916.

The Congregation of Charity recently took important decisions in favour of promoting agricultural co-operation in the management of the lands owned by charitable institutions, and of ensuring to peasants habitually employed on the congregation's own farms a minimum of social assistance correspondent to modern needs. The provisions in question are courageous and are destined to produce the best results. They could easily be adopted by the administrators of all charitable institutions which own rural land, and several congresses have already declared themselves to this effect (1). We think therefore that it will be interesting to describe them.

Above all the council of the congregation affirmed the duty of public administrations owning rural property to endeavour to raise the level of the intellectual, moral and economic life of the peasants working on their land. The council was further of the opinion that the best means of doing

(1) In Bologna, on the 15th of last October in a meeting of the representatives of labour organizations, held to discuss the letting of rural lands owned by charitable institutions and the relations between agricultural and labour co-operative societies, an order of the day was approved, which affirmed the power of the public administrators of the province to give a preference in letting agreements to the co-operative societies, particularly to the local federation which was their best known nucleus, and which invited the delegates of the public administrations of the labour organizations to nominate a mixed technical commission charged a) to formulate "general regulations for letting" which should legitimately safeguard public interests and the particular interests of the contracting parties; b) to act permanently in an arbitrating capacity in order to prevent differences which might arise as to such leases. The congress further expressed a desire that the provincial federation should oblige its adherent co-operative societies to become more and more closely connected with the organizations existing specifically for collective provisioning and sale of the articles and commodities necessary to agriculture and derived from it (agricultural unions, autonomous communal institutions, co-operative consumers' societies, etc.), thus gradually eliminating the useless middlemen who burden production as much as consumption. See in this connection *La Cooperazione Italiana*, Milan, No. 1215, 27 October 1916.

this was to entrust the management of lands to the *co-operative societies formed by the agricultural labourers*, whenever these gave proof of an adequate technical and financial capacity.

In order to guarantee that co-operative societies undertaking the management of the congregation's farms would be faithful to the principle of co-operation, and that their technical, book-keeping and economic duties would be regularly discharged, these societies were advised to join the *Federation of Agricultural Co-operative Societies* which has offices at Milan and which proposes to aid agricultural co-operation in the matter of technique and bookkeeping, financing it and assisting the societies' collective purchases and sales.

Further, in order to aid peasants working on farms let to individuals, the council resolved :

1) To render obligatory the contracts as to settlements and the labour agreements in force in the respective districts, especially as regards :

- a) minimum wages in kind and money and in shares of profits ;
- b) hours of labour and of rest ;
- c) guarantees and insurances in cases of illness, accident, disablement and old age ;

d) the registration of contracts of settlement and labour by employment offices ;

e) the decision of disputes between employers and peasants by submitting these to the commission of conciliation and arbitration annexed to the employment offices.

2) The council resolved that persons farming lands in districts in which special settlement contracts and labour agreements were not in force, should apply the most favourable conditions as to hours and wages - both in money and in kind — which were locally customary.

They should annually deposit with the administration of the congregation a copy of the contract made with every labouring family, which should conform to a model furnished by the administration.

The guarantees must be given to the peasants, to provide for the cases of sickness, accident, disablement and old age, which we have already mentioned under letter c).

Disputes arising between employers and peasants, and outside the territorial sphere of the arbitrating commission, should be submitted for amicable settlement to the president of the congregation's technical office.

The share of the administration in the costs of these provisions for the peasants will be :

- 1) A quarter of the premium for insurance against accidents.
- 2) One lira for each peasant registered or to be registered by the National Thrift Fund (*Cassa Nazionale di Previdenza*), such lira to diminish that minimum share of the registration fee which will be chargeable to the peasant.

3) A third of the premium for the insurance against fire of the moveables, implements, clothes and food of a peasant, the other two thirds remaining chargeable to the employer and to the peasant, respectively. The

total sum of these contributions, estimated for each property, should be taken into account at the time of the expert valuation of the dues burdening rent, and should be part of the sum annually deducted from these dues, to the credit of the employer.

All the above provisions will be comprised in the lists of stipulations as to properties let in the current year ; and since their effects can be realized rapidly and can reach a large number of peasants, the council decided to invite employers enjoying current leases to apply the conditions which favour peasants from the beginning of the coming agricultural year.

Finally to complete these provisions the council decided :

1) to vote 600 liras (1) to the employment offices for peasants, taking such sum from the reserve on the balance-sheet of 1916, and to include a like contribution in the budgets for future years ;

2) to found an itinerant chair of domestic economy, with the object of giving rules for rational housekeeping to families labouring on the lands of the administration ;

3) to promote and subsidize enterprises tending to the spread of culture, such as evening and Sunday courses of elementary instruction in the farms, circulating libraries, courses of technical instruction, etc.

4) to occasion an agreement with other charitable enterprises owning rural lands, for the purpose of instituting an *agricultural inspectorate* which will see that the rules stipulated in leases in the interests of peasants are effectively applied, that the laws of hygiene and sanitation are observed, that there is compulsory education, etc.

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2. THE POSITION OF CERTAIN POPULAR BANKS IN 1915. — *Credito e Cooperazione*, organ of the *Associazione fra le Banche Popolari*, Rome, No. 19, 1 October 1916.

The Agricultural Bank of Mantua (2). — The report accompanying the balance-sheet for 1915 (45th year) of this bank opens by drawing attention to the rapid decline in deposits in the first months of the year — from eighteen and a half millions at the end of 1914 to fourteen millions in the following May — ; and to their no less rapid increase after the beginning of the war, so that in October 1915 they again reached eighteen millions and in December twenty-one and a half millions. Thus in the first half-year there were difficulties due to the diminution of resources, and other difficulties in the second half-year due to the plenty of money, much of which was deposited only on a precarious title. These difficulties, and the necessity of being prepared to face the eventual withdrawal of part of the deposited sum, showed the bank's administrators the path they must follow. In the first place securities were prudently reduced and then the

(1) 1 s = 1.2611 liras at par.

(2) *La Banca Agricola Mantovana*.

normal course of dealing with them was resumed, such investments being preferred as were not only safest but also most readily realized. The results of this prudent management are evident in the balance-sheet, of which the principal figures can be resumed as follows :

Shareholder's property : 1,262,704 liras — including 443,000 liras in share capital and ordinary reserve, 136,000 liras in repaid shares and profits, and a special fund of 683,000 liras.

Deposits : 21,453,391 liras — including small savings amounting to more than ten millions, five millions of ordinary savings deposits, more than five millions on current account and 776,000 liras in interest-bearing bonds.

Altogether resources amount to about twenty-two and three quarter millions, as to which sum the following investments should be noted : securities on 31 December, ten and a half million ; the bank's title-deeds, more than seven million ; advances remaining, four million liras. Net profits amounted to 65,784.50 liras ; and of them 18,767 liras were assigned to the shareholders, namely 5 per cent. on their shares which is the maximum allowed by the by-laws, and 37,149 liras to the fund destined to guarantee values, while the rest was placed at the council's disposition for the employees' thrift fund, and for remunerations, allocations, etc.

The Popular Mutual Bank of Teramo (1). — This is one of the oldest establishments for popular mutual credit, having originated in 1881. The difficulties which it had to overcome in 1915 were not trifling. They did not however prevent it from developing an activity beneficent both to the city and to its own clients : it placed large means at the disposal of the commune for the acquisition of grain ; it repaid to depositors in less than ten months a million and a half liras, and it invested in national loans — all this without neglecting local needs and those of small commerce, in the interests of which the rate of discount was always kept within moderate limits — ; and finally it strengthened its banking business by a considerable sum of net profits.

To resume the bank's enterprise in this year we will give the following figures from its balance-sheet :

The total capital amounted to 634,837 liras, including 150,000 liras of capital in shares (3,000 shares of 50 liras each held by 1,234 shareholders), 75,000 liras of ordinary reserve, 397,000 liras of extraordinary reserve and a reserve of 13,000 liras to provide against oscillations in values.

Deposits on current account amounted to 146,000 liras and savings deposits to 2,283,463 liras. There was a reduction of 789,000 liras in the savings deposits, as compared with the preceding year. Not only the state of war, but also the diminished remittances of emigrants, the local agricultural crisis caused by the failure of the harvest and the vintage which obliged agriculturists to withdraw their deposits, and finally the issue of the national loans, were responsible for the decline in saving.

(1) *I.a Banca Mutua Popolare di Teramo.*

Securities at the end of the year gave a balance of 2,494 bills for 2,423,336 liras, including 2,022,231 liras on bills expiring within three months and 401,105 liras on those expiring later. Bills discounted in 1915 numbered 10,972 and were for more than eleven million liras. The diminution in the discounts effected, as compared with 1914, was 42,000 liras. Dishonoured bills for the year are represented in the balance-sheet by only 23,000 liras.

The title deeds of the bank's property amounted to 678,000 liras, 660,000 liras thereof being invested in treasury bonds. As regards the profit and loss account, the net profits amounted to 61,000 liras, of which sum 11,887 liras was assigned to the shareholders at the rate of 4 liras a share, 43,000 liras went to augment different reserve funds, 2,000 liras was granted to beneficent objects and 2,000 liras to the industrial school.

The Popular Mutual Bank of Verona (1). — This is one of the oldest popular banks in Venetia, having been founded in 1867, that is at the beginning of Luigi Luzzatti's organization of a propaganda of popular credit. It has always remained faithful to its early principles, and thanks to prudent administration it has attained morally and materially to a leading position. Like kindred institutions it felt last year the effects of the country's economic crisis as determined by political events: the sums deposited in this bank were at first reduced, and later, when calm had returned to the market, it had to find the best investments for the considerable sum which the plentiful return of deposits placed at its disposal. However it was able to overcome transitory embarrassments, by rediscounting largely and frequently the securities of similar banks, by subscribing to the national loans, or by reducing the rate of interest paid on deposits of each category in order to lessen their superabundance. By such measures the hard times were successfully passed. The figures on the balance-sheet are most satisfactory and show the institution's flourishing condition. We will quote the principal of them:

The shareholders' property was 756,470 liras of which 484,308 liras represents the capital (13,453 shares of 36 liras each) and 272,162 liras the reserve.

Deposits amounted to twelve and a half million liras, two million on current account and ten and a half in savings deposits. The increase shown by this item as compared with 1914 is of 1,400,000 liras.

Securities held at the end of the year gave a balance of 4,236,092 liras, showing a diminution of 800,000 liras as compared with the preceding year's balance. We have already noticed the reasons for a limitation of activity, and these also affected the year's profits.

The bank holds title-deeds of its property for 2,373,873 liras, all offering the surest guarantee and being readily realizable.

The net profits amounted to 79,392 liras; of which 30,000 liras went to augment the reserve, 24,205 liras were assigned to shareholders at the

(1) La Banca Mutua Popolare di Verona.

rate of 5 per cent. on their paid-up capital, and the remainder was divided among the council and the employees.

The profit and loss account shows that this bank also spent during the year more than 3,000 liras on beneficent objects.

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3. THE STATISTICS OF THE CATHOLIC SOCIAL AND ECONOMIC INSTITUTIONS. —
Azione Sociale, organ of the Social and Economic Union of Catholic Italians, Faenza, No. 14
November 1916.

The *Unione Economico-Sociale fra i Cattolici Italiani* is compiling general statistics as to social and economic associations in Italy. With this object it has already circulated a special form of questions, asking the name of a given society, its site and address, data as to its constitution — whether legal or merely actual —, the number of its members (including those under arms), its collective property on 31 December 1915, its receipts in 1915, the assessment of members, the assessments or premiums received in 1915, its expenses in 1915.

Societies of the following categories are the objects of the enquiry: mutual aid societies, mutual insurance societies (of live stock and against fire and hail), agricultural unions for collective purchase, consumers' co-operative societies, labour and producing co-operative societies, co-operative societies for agriculture and collective letting and for building popular dwellings, and trade organizations (including offices of labour and secretariats of the people and of emigration).

National federations adhering to the Union have also been invited to supply data relative to 1915 or of later date, in order that a complete picture of Catholic economic organization may be obtained. In due time we will show the chief conclusions drawn from these important statistics.

RUSSIA.

1. CO-OPERATIVE SUPPLY AND PRODUCTION OF AGRICULTURAL MACHINES.

- 1) КОВАЛЬ В. Д. (Koval V. D.): CO-OPERATIVE TRADE IN AGRICULTURAL MACHINES in *Машина в сельскомъ Хозяйствѣ* (*The Machine in Agriculture*) №. 1, Kiev, 15 January 1916;
- 2) ДЕШЕВОЙ М. (Dechevoj M.): THE AGRICULTURAL MACHINE INDUSTRY IN RUSSIA, *ibid*: Nos. 10 and 11, 31 May and 15 June 1916;
- 3) Д-ОЈ М. (D-oj M.): THE DISSEMINATION OF AGRICULTURAL MACHINES AND IMPLEMENTS BY CO-OPERATIVE CREDIT, *ibid*: Nos. 14 and 15-16, 15 August and 1 and 30 September 1916.

The collective supply of agricultural machines and implements in Russia is now chiefly undertaken by the co-operative credit unions, who have

been empowered by a statute of 1895, having reference to 1905, to conduct such enterprise. The number of co-operative credit unions who take upon themselves the task of providing agricultural machines for the rural population increases year by year, as does the sum of money which they thus employ. These facts appear from the following table :

Year	Number of Co-operative Supply Associations	Sums they spend on buying Agricultural Machines
1910.	—	3,200,000 roubles
1911.	—	4,900,000 "
1912.	1,638	6,346,000 "
1913.	2,457	9,638,000 "
1914.	<i>circa</i> 3,000	14,000,000 "

Last year co-operative supply was responsible for 10.8 per cent. of the whole trade in machines.

The sums which the co-operative unions lend to their members for the purchase of agricultural machines vary in amount. According to an enquiry made by the *Distribution of Agricultural Machines* the following sums were lent with this object in 1912 by the co-operative credit unions and the savings and loan funds to their members :

by 7,754 co-operative credit unions. .	8,635,921 roubles (1)
» 1,558 savings and loan funds. . .	3,029,850 »
<hr/>	
in all. . .	11,665,771 »

Of the 3,000 co-operative unions (20 per cent. of all the credit unions), which in 1914 undertook the supply of agricultural machines, only 723 were combined in the eleven following federations of co-operative unions :

(1) 1 rouble of gold = about 2s 1½ d at par.

Name	Year of Foundation	Number of Co-operative Unions combined	Sums spent on Agricultural Machines
1. of Kiev	1907	190	140,000 roubles
2. » Jekaterinburg	1907	74	333,760 »
3. » Melitopol	1903	34	79,484 »
4. » Berdjansk	1901	25	55,690 »
5. » Tersk	1911	86	10,438 »
6. » Nikolaiev	1915	9	—
7. » Jekaterinoslav	1911	60	20,012 »
8. » Nijni-Novgorod	1911	106	26,829 »
9. » Kubanj.	1911	23	59,278 »
10. » Zlatoust	1911	20	93,747 »
11. » Blagodarinsk	1907	27	73,959 »
		723	975,197 roubles

The co-operative supply of agricultural machines has developed most importantly in the east in the federations of Jekaterinburg and Zlatoust, and in the south in the federation of Kiev. The amount of the sums spent on agricultural machines is not always directly related to the number of single co-operative unions which a federation combines, a circumstance to be explained by the fact that unfederated co-operative unions also supply their demand for agricultural machines by availing themselves of the services of the federations as central purchasing organizations. This practice becomes increasingly prevalent as the co-operative instinct grows and the co-operative unions spread. In 1914 the co-operative federations were responsible for seven per cent. of all the co-operative supply of agricultural machines. All signs point to a very notable increase of this percentage in the near future ; for the whole course of co-operative supply tends indubitably to the formation of co-operative federations and thus assures the fruitful development of the co-operative supply of agricultural machines. It is symptomatic in the case of several federations — those of Kiev, Jekaterinburg, Tersk, Nijni-Novgorod and Kubanj — that they are not content merely to supply machines, but wish also to teach the scientific use of these, after they have come into the hands of the peasants, and thus to bring about good methods of farming. To this end they engage agricultural experts, set up stations where advice may be had as to agriculture, initiate co-operative unions for machines and so forth ; all of which measures are calculated, like the machines themselves, to intensify and improve agriculture on the peasants' farms.

An effort which is now being made by the co-operative unions to aim

at the production of machines themselves may hold much promise for the future ; for the import from foreign countries of machines, on which annually a sum of 63,800,000 roubles was expended, has been almost stopped. The co-operative federations in Jekaterinburg and Melitol should be mentioned in this connection as pioneers. They have already worked out plans for establishing machine factories which have the necessary strong backing. A co-operative factory which turns out 1,000 corn-winnowing machines a year is now at work in Melitopol. In view of the present large demand for machines it may be taken as certain that this factory will soon be followed by others.

2. MUTUAL CREDIT SOCIETIES IN RUSSIA ON 1 JULY 1915. Сводъ Балансовъ Обществъ Взаимнаго Кредита дѣйствующихъ въ Россіи на 1 іюля 1915 года. — Министерство Финансовъ. (Издание Особенной Канцеляріи по Кредитной Части) (*Collection of Summarized Financial Statements of the Mutual Credit Societies operating in Russia, showing their Condition on 1 July 1915*) Special Office for Credit Business, Petrograd, P. P. Sojkin, 1916 (folio) 39 pp.

We take the following most prominent data from the half yearly report, based on figures, which has been issued by the special office for providing credit of the Ministry of Finance, as to the position and activity of existing credit societies on 1 July 1915.

The credit societies which were modelled on the Brussels "Union de crédit" in Petrograd in 1864, and of which the first fifty years of life were honoured at the appropriate time in our Review (I), numbered 1,179 in all the Russian State on 1 July 1915. Thirty-one of them were in Petrograd, eight in Moscow, about 170 in the capital towns of governments and provinces, and 970 in those of districts and in small country places. Their existence in the last named — the circumstance that these societies are found even in small market towns — has particular interest for us ; for thus they enter into business relations with the rural population, who are able to seek credit from them. The existing credit societies have by the law of 11 May 1898 been empowered to accept promissory notes secured by land and in this way to make short-term credit accessible to farmers. Exceptionally and with the permission of the Minister of Finance they may give credit not only to their own members, most of whom are tradespeople and small manufacturers, but also to the rural communities and the peasants' co-operative societies.

Of the 1,179 societies 1,039 published their reports punctually. The other 140, of which some have their spheres in territory now held by the enemy and some have been abandoned, have partially discharged their functions but they could not intimate what results they had obtained on 1 July 1915.

(1) See *International Review of Agriculture*. December 1914.

The number of members enrolled by these societies amounted to 566,182. The societies in the principal towns had of course the largest membership: in the First Society of Petrograd there were 8,137 members, in the society of the district zemstvo of Petrograd 5,824, in the Society of Tradesmen of Moscow 3,390, in the First Society of Odessa 5,477 and in the First Society of Riga 3,576. The smallest membership — thirty-six — was shown by the society of Golodaev in the Don district.

The societies and their membership were distributed as follows in the different territories:

Name of Region	Number of Societies	Membership
1. Northern	77	52,662
2. Moscow manufacturers	27	13,541
3. Central farmers	43	17,794
4. On and beyond the Volga	65	33,720
5. White Russia and Lithuania	79	26,563
6. Little and South Western Russia	244	140,033
7. Region of Southern Steppes	248	162,862
8. Kankasas	136	63,998
9. Siberia	30	12,805
10. Central Asia	18	5,883
11. Baltic Provinces	49	26,395
12. Kingdom of Poland	23	9,926
Total	1,039	566,182

As can be seen the majority of existing credit societies, and those having the largest membership, are scattered over Little Russia and the south and south western part of the State, that is over the districts which are noted as providing corn to Europe — the governments of Poltova, Tchernigoff, Kiev, Bessarabia, Tauria and Podolia.

The capital of the societies amounted to 144,268,000 roubles 115,791,000 roubles constituting the working capital, 15,579,000 roubles the reserve funds, and 12,898,000 roubles special capital. The capital of the First Petrograd Credit Society was 4,644,000 roubles, that of the Second Petrograd Society 4,327,000 roubles, and that of the Moscow Tradesmen 5,259,000 roubles. Their deposits reached 586,738,000 roubles, 188,615,000 roubles being withdrawable after notice had been given, and 398,123,000 — which was on current account — without notice. Their loans amounted to 106,318,000 roubles.

Discount being the chief business of the existing credit societies, 493,727,000 roubles under the head of exchange was more than half the whole sum on the credit side of their accounts. They lent 115,960,000

roubles on paper securities ; 35,526,000 roubles on merchandise and certificates of merchandise ; and 71,015,000 roubles on real estate, of which 5,575,000 roubles was lent on promissory notes secured by land. The value of the paper securities was entered in the books as 23,918,000 roubles.

These few leading facts are enough briefly to indicate the position and the activity of the existing credit societies on 1 July 1915. Their significance, as regards their methods and the operations they conduct, is for the most part local.

UNITED STATES.

THE CO-OPERATIVE MARKETING OF LIVE STOCK IN WISCONSIN. — R. M. Orchard
in *The Banker-Farmer*, Vol. III, No. 7, June 1916. Champaign (Illinois).

Farmers' associations for the marketing of live stock in the United States now number about 500 and have had some excellent results.

The Muscoda Farmers' "Shipping" Association may be taken to be typical of organizations of this kind in Wisconsin. Its members are a group of farmers who have agreed among themselves to market their live stock together. In November 1913 they came together and chose a president, a secretary-treasurer or manager, and a yard man.

A farmer desiring to sell by the medium of the association gives a list of his stock to the manager, who keeps a register of the names of associated farmers, the number and kind of animals they have to market, and the approximate weights of these. When the manager sees from his register that he has a truckload of hogs, cattle or sheep ready to be marketed he engages a truck from the railway company by telephone for a particular day ; and then, also by telephone, instructs the farmers to deliver their stock in time. On the appointed day it is received, weighed and marked by the yard man, who keeps a list of it and of the owners, weights and marks. The animals are then loaded and sent to Chicago or Milwaukee, according to their number and quality. On the same day the manager sends to the commission house, which will dispose of the stock in the central market, an invoice in which the names of the owners and the weights and marks of the animals are indicated. When the truck reaches the central market it is unloaded and the animals are fed and watered. If they are cattle they are then sorted according to their owners ; if they are hogs it is considered more profitable to grade them according to quality. The animals are afterwards weighed and sold ; and the commission agent to whom they have been consigned pays, on the very day of the sale, the money due for them into the account which the "Shipping" Association has at a bank. He afterwards makes a report of the sale to the manager of the association, stating the costs of freight, yard accommodation, insurance and food, as well as the amount of the commission, all of which have been deducted from the gross price.

On receiving this statement the manager in his turn draws up a report setting forth the weight of the animals before their journey and at the central market, the price obtained at the central market for all the stock and for that of individual owners, the individual's share of expenses on the journey and at the market, the commission charged by the association and the share of this falling on individuals. He then prepares a statement and draws a cheque for each individual owner.

The charge for feeding the animals on their journey is based on the number loaded in a truck and the amount of food given them. For hogs the usual charge is from five to eight cents a head. The commission charged by the association to cover expenses and form a small reserve fund is three per cent. on the price of cattle and hogs and 15 cents a head on calves. A farmer not a member of the association may market his stock by its means if he pay a commission of 5 per cent. on the price of cattle and hogs and 25 cents a head on calves.

The sums thus received pay the manager's salary and the wages of the yard man and his helpers and cover any losses incurred by the death or depreciation of animals during their journey. Thus it may be said that by exacting from the owners a small premium the association insures the live stock against the risks of transport.

In 1915 the association sent out 56 truckloads of stock, as against 43 in the previous year ; and 155 farmers availed themselves of its services. Precise figures cannot be given as to the amount of extra profit which the farmers derive from such co-operative marketing but it may be estimated approximately at from 5 to 25 per cent. This extra profit might however become a loss if the manager did not watch the market very closely.

Part II: Insurance and Thrift

GERMANY.

THE PRINCIPAL FEDERATION OF SOCIETIES FOR THE INSURANCE OF CATTLE IN EAST PRUSSIA.

SOURCES :

MAKTENS, Administrator : Vom Hauptverbande Ostpreussischer Viehversicherungs-vereine. Berichte für 1914 und 1915 (*The Principal Federation of East Prussian Societies for the Insurance of Cattle : Reports for 1914 and 1915*). *Georgine*, nos. 65-66, 69-70 and 77-78 of 14 and 28 August and 25 September 1915 and nos. 39-40 and 41-42 of 13 and 20 May 1916, Königsberg.

§ I. GENERAL REPORT OF ACTIVITY IN 1914 AND 1915.

The federation was definitely founded on 11 November 1913 by the union of sixteen societies, and after having freed itself from the guardianship of the Chamber of Agriculture it reached the important position of an independent enterprise, deriving profits from its reinsurance fund and the subsidies allotted to it by the Chamber of Agriculture and the province, in the form of sums assigned to administrative ends.

It was obliged at the beginning of the war to limit to the transaction of current business its federal activity but this could resume its former course from 15 December 1914. In the first year of its existence the federation did no more than extend insurance within the territory of the province, principally by founding new societies in favour of which it pursued an energetic propaganda. But since the war continued, the following year — 1915 — could not but be devoted to an effort to maintain the *status quo* and to reconquer lost ground. This was why the federation was obliged to confine

itself to seconding, by its actions and by support in the form of advice, the federated societies and to reinforcing their interior organization. The restoration of societies which had not been able to survive the crisis had also to be secured.

Already small proprietors were represented as well as agricultural labourers, the betterment of whose peculiar economic conditions is one of the first tasks of local societies for the insurance of cattle.

The large landowners tended to form societies among their employees and cause the small local agriculturists to adhere to these. They adhered to them themselves because they wished to encourage their development : they assumed the duties necessary to their conduct and showed their interest in them on every occasion. The need for insuring the cattle of the employees of large estates, and the profit the employer derived from such insurance, were increasingly recognized.

The principal efforts of the federation were towards generalizing its own scope. But among the old societies of the province more difficulty was encountered than in districts where societies were freshly founded : the old societies very generally looked upon the federation as an enterprise having a compulsory character and enclosing the seeds of a greater or less restriction of liberty. A meeting of insurance societies had the effect of dissipating these prejudices ; and made clear the principles on which were based the terms of affiliation and the consequence of the measures which facilitated the decision to affiliate.

Since the Minister of Agriculture attached particular importance to the *insurance of pigs*, the federation undertook enquiries into the scope such insurance would have and the question of whether or not it would supply a need. If the federation should extend its activity to this branch of insurance it proposes to keep its risks entirely separate, that is to differentiate cattle and pig insurance because the latter is attended with very serious risks, especially in East Prussia. Consequently a part of the reserve fund — 10,000 marks (1) — has already been earmarked for pig insurance.

In spite of its comparatively small number of members the federation believed itself able to do without larger guarantees, and therefore rejected for the time a scheme cherished by the province of Brandenburg of grouping provinces in one vast *Reinsurance Federation*. This scheme embraced East Prussia and Silesia in addition to Brandenburg.

The federation's technique of insurance has been tested in the past years. It tends to secure within the federation equal losses or compensation for losses, the favourable conditions with regard to losses which obtain in some societies compensating for such as are less favourable in others.

If losses indirectly due to the war be left out of account — although the period which has passed may be considered normal as regards casualties among the live stock — it may be concluded that succeeding years will see this system of compensation realized, even if important casualties should

(1) 1 mark = about 11 ³/₄ d at par.

occur, and that after the first period of insurance — that is at the end of five years — the system will have been entirely tested.

Having completely covered its costs of foundation the federation could keep its reinsurance fund of 64,616.99 marks intact ; and was thus able to participate to the extent of 40,000 marks in the fourth war loan.

§ 2. STATISTICAL DATA AS TO BUSINESS DONE IN 1914 AND 1915.

The following figures resume the statistics for twenty-eight and thirty-one cattle insurance societies, on 31 December 1914 and 31 December 1915 :

	1914	1915
	—	—
Number of members	1,009	931
Number of insured animals	1,202	1,082
Insured sum :		
a) total sum marks	393,064	369,649
b) average for one animal "	327	342
Premiums:		
a) total sum: "	6,384.61	7,018.05
b) percentage of insured sum "	2 %	2 %
Casualties:		
a) indemnities:		
total number "	32	39
relatively to number of insured animals "	32.66 %	33.60 %
b) slaughtered animals: "	25	20
c) indemnities in terms of percentage "	80 %	80 %
d) gross indemnities "	8,152.50	9,686.90
e) profits from slaughtered animals:		
total sum "	2,223.75	3,265.85
percentage of insured sum "	24.72	33.04
f) net indemnities "	5,958.75	6,421.05
Costs of veterinary attendance: "	1.57 %	1.74 %
a) total costs: "	700.78	569.50
b) percentage of insured sum: "	0.18 %	0.10 %
Costs of Administration:		
a) total sum: "	189.69	88.83
b) percentage of insured sum "	0.05 %	0.02 %

	1914	1915
Sum held :		
a) total sum :	" 3,145.43	3,517.41
b) percentage of insured sum	" 0.80 %	0.95 %
Deficit :		
a) total sum :	" 3,185.19	2,319.17
b) share of federation ($\frac{4}{5}$) :	" 2,548.10	1,855.37
c) share of societies	" 637.09	463.80
Causes of casualties :		
a) accidents :	5 = 16 %	6 = 15.38 %
b) parturition :	7 = 22 %	4 = 10.26 %
c) pulmonary affections	— —	3 = 7.69 %
Tuberculosis :	5 = 10 %	3 = 7.69 %
d) consequent on aphthous fever	3 = 9 %	2 = 5.13 %
e) affections of the circulation :	2 = 6 %	2 = 5.13 %
f) meteorization	2 = 6 %	— —
Foreign bodies :	— —	1 = 2.56 %
Affections of the stomach and intestines	— —	9 = 23.08 %
g) other internal diseases :	7 = 22 %	9 = 23.08 %
h) other external diseases :	— —	— —
i) unknown causes	1 = 3 %	— —
Total number of dead animals	32 = 100 %	39 = 100.00 %

Scope;

On 31 December 1914 the federation comprised thirty-four societies, of which twenty-eight were active, had 1,009 members and insured 1,202 cattle for a total sum of 393,064 marks. Of these twenty-eight societies only five were of old foundation and had adhered to the federation ; twenty-three had been founded by it. The war prevented six societies — having 105 members, 148 cattle to insure and an insured sum of 48,000 marks — from becoming active.

On 31 December 1915 the federation comprised thirty-five societies of which twenty-six were active, among them the three new societies of Althof-Insternburg, Deubben and Geierswalde.

Of the other societies two, those of Sieslack and Monczen, resumed on 1 January 1916 the activity which they had been obliged to interrupt in consequence of the war ; and three societies, also obliged to suspend business — those of Gerkichnen, Prostken and Kakowen —, as well as two new societies — of Augustpönen and Enzuhnen —, will probably have had part in the

operations of 1916. Two other societies were founded at the end of 1915 (Bledan and Schwanis) and these also became active on 1 January. The twenty-six active societies comprise altogether 931 members and 1,082 heads of cattle insured for 369,649 marks. These figures show retrogression in comparison with those for the previous year (1914) ; but it is right to note the difference in this respect between the movement of business within the societies during the year, and the total cessation of the activity of societies fully active in the previous year. In the case of the former the reduction in the number of members was one of only thirty-one, that of animals was of forty-five and that of the insured sum 4,875 marks. As of these forty-five heads of cattle indemnities were paid for thirty-nine the retrogression should be expressed as one only of six. In the second case, in which we include societies not yet active and those which had ceased to be so since the preceding year, the retrogression is certainly very marked, the reduction being one of 150 members, 211 heads of cattle and 33,400 marks.

The difference between the number of members and of heads of cattle shows that it is not only owners of single cows—for whom this organization was especially intended -- who have adhered to the various societies. The statistics allow the further conclusion that small societies, insuring only twelve, fifteen or eighteen heads of cattle, have been founded. The principle of admitting small societies, on which the federation rests, has entirely withstood proof.

The federation has adopted an important principle — that namely which obliges members to insure with their societies all the cattle they possess on the land within the society's sphere, of course in the measure in which the animals allow of insurance. Although this rule is not always easy to apply, and is often an obstacle to the foundation of new societies and especially to the adherence of existing societies insuring cattle, the federation judges it necessary not to depart from it because only its unerring and inflexible observation can ensure to the small landowners all the advantage which insurance is capable of affording them.

Insured Value :

The total sum insured was 393,064 marks in 1914, that is 327 marks per insured animal which gives a reasonable standard. The same may be said of 1915 when this average was 342 marks. It is however to be anticipated that it will be much raised owing to the increase in the price of cattle. We here touch on a question as to which it is not always easy to give weight to the federation's principle in the model by-laws of the societies

On the one hand live stock must not be insured *above* its value lest too great risks be assumed ; on the other it must not be insured *below* its value if it be desired to give to the insurer real help which will allow him, if a casualty occur, to procure an animal to take the place of that lost. The case of under-insurance is met with most frequently : people tend to insure their beasts below their value because they are unwilling to pay a premium

which seems to them excessive before they are face to face with the dreaded occurrence of a casualty. It is this state of mind which it is attempted to combat.

The federation makes a point of the insurance of cattle up to their full value, even when this has been increased, because only thus can the economic aim be fully realized.

Premiums :

Two per cent. has generally been exacted during the first period of insurance. This rate has been universally applied to newly founded societies, but in the case of old societies already adherent to the federation it has been possible from the beginning to charge a lower rate.

It is probable that after the first period and at the end of each succeeding one the level of premiums will be quite different in the different societies : it varies according to the measure in which the societies have had to bring the federation under contribution during the past period of insurance. The societies which, thanks to good farming, have gone only a very little beyond that normal rate of casualties for which the federation compensates to the extent of four fifths, or have had no casualties at all to register, can count on a reduction of the premium bringing it below two per cent. On the other hand those which have not been able to make up for the various years during which they went beyond the normal rate, by economies in other years during which they did not reach it, must face the prospect of increased premiums in the succeeding period of insurance

Casualties :

In 1915 indemnities were paid for thirty-nine animals, that is 3.60 per cent. of the total number insured, as against thirty-two or 2.66 per cent. in 1914. Of these thirty-nine animals twenty were slaughtered. The gross sum of the indemnities was 9,686.90 marks or 80 per cent. of the insured value. The sum realized for the slaughtered animals was 3,265.85 marks or 33.04 per cent. of the gross amount of indemnities, the net amount of these being therefore only 6,421.05 marks or 1.74 per cent. of the total value insured.

In this connection it should be stated that the percentage of the gross sum of indemnities realized from the slaughtered animals was much higher than in the preceding year — 33.04 as against 24.72 per cent. It is susceptible however of a yet greater rise in value.

Experience shows generally that during a quinquennial period an insurance society has one or two good years in which it does not even reach the normal level of casualties, two medium years in which it receives only a little more than the sum which it has to pay out in indemnities, and one or two bad years in which indemnities much surpass the amount of premiums. The differences in the proportion of the profit from enforced slaugh-

tering to the total sum of indemnities are sometimes so great that they cannot be explained only by the varying quality of the meat sold: they are due to the diversity of the causes leading to the animal's death but they give rise to a certain doubt as to the skill with which some societies conduct commercial transactions.

It is true that some districts have still to submit to the knacker's exclusive right to the carcase for which, as a rule, he pays a very small indemnity or none at all. The federation however does all it can to stimulate the societies to obtain the maximum profits from slaughtered animals, in order thus to reduce total losses to the strict minimum.

Costs of Veterinary Attendance :

These amounted in 1915 to 569.50 marks or 0.10 per cent. of the round sum insured.

In comparison with 1914, in which 700.78 marks or 0.18 per cent. was spent under this head, they had certainly diminished ; but this should not lead to the conclusion that most veterinary surgeons in discharging their duties observed the precepts of general interest which are at the basis of the activity of the insurance societies. The diminution is to be ascribed to the fact that veterinary surgeons were summoned less frequently, for the good reason that they were not to be found everywhere where they were wanted.

Conditions resultant on the war — the generally inferior quality of live stock — produced a conviction that in regard to the question of risks *the introduction of a compulsory veterinary examination* is absolutely necessary. Unfortunately this measure would in many cases be a dead letter, for in numerous if not in all districts no veterinary surgeon is available, so that insurance which provided for the compulsory examination would be impracticable. Where a veterinary surgeon is to be had his services would involve the societies in a large additional expense. It was necessary therefore to give up the project of making the compulsory examination general, merely exhorting the societies to exercise the greatest caution when there was question of their accepting new animals for insurance.

Costs of Administration :

Like the costs of veterinary attendance those of administration form a part of the expenses which, if losses keep within their normal limit of 70 per cent., ought to be covered by receipts; and they should naturally, in the interest of the societies, be kept as low as possible. Their total sum — 88.83 marks or 0.02 per cent. of the whole insured value — shows a decrease as compared with 1914 when such percentage was 0.05. This item of the societies' expenditure will in the future be perceptibly increased: for hitherto the societies have not had to send representatives to large meetings, paying their travelling expenses ; and they will have gradually to increase their stock of printed matter, with which the federation initially provided

them, free of cost. The condition necessary to keeping administrative costs as low as possible is that of gratuitous service.

The society has been preserved in a good condition financially because the year 1915 allowed the principle of compensatory losses — which, as we have seen, is fundamental to the federation — again to be observed. This result is due, it is true, to the grant of a sum of 1000 marks by the "Notstands-fonds" of East Prussia, as indemnity for losses indirectly caused by the war, and to the effect of the subsidies accorded by the Minister of Agriculture in aid of the societies in embarrassed circumstances. For this object the federation receives an annual grant of 3,000 marks. But during these two years the whole of this amount has not been used, and it has been possible to pay the sum so saved into a *relief fund*, which is intended to allow aid to be given at the end of the period of insurance to societies then in the debt of the federation for advances. In this way these societies will not have to raise their premiums payable in the succeeding period in order to redeem the debts thus incurred. A request made to the minister for fixed financial support, which would allow costs of administration and former printing costs to be met, was however not granted.

Causes of Casualties :

In this respect 1915 showed improvement as compared with 1914. The societies can have no influence except as regards casualties caused by accidents, difficult parturition and the swallowing of foreign bodies. The accidents have certainly increased in number by one; but the casualties consequent on parturition have diminished by three, those consequent on tuberculosis by two and those consequent on apthous fever by one. By putting into execution its plan of adopting the method recognized by the State, as being the best for the fight against tuberculosis and that which those interested can themselves follow, the federation will reduce the ill effects of this devastating disease on the total sum of losses.

But this plan cannot be put into execution before the return of normal circumstances.

The federation can also exercise a certain influence in favour of the reduction of casualties consequent on accidents and it will not fail to do so. The accidents are usually due to the carelessness if not to another fault of the insurer. The federation devotes much attention to a revision, as complete and extensive as possible, of all the rules concerning its rigorous inspection of the care given to animals and of the manner in which they are lodged and fed.

Diseases of the digestive organs (intestinal tumours, appendicitis, twisted intestines, obstructions, digestive troubles) were responsible for nine casualties in 1915 — a very large number, perhaps explained by the bad quality of the forage harvest. Among other internal diseases occur cardiac affections, dropsy, affections of the matrix, inflammation of the spinal cord, fistulae of the salivary glands, and blood poisoning.

Financial Position. Number of Casualties beyond the Normal Limit. Compensation for Risks (the "fifth") :

The total expenditure of the societies under the head of casualties, costs of veterinary attendance and costs of administration — premiums paid to the federation being included —, amounted — when the receipts from premiums paid to the societies, the slaughtering of animals and the ministerial subsidies left over for 1915 had been deducted — to a sum of 2,319.17 marks (3,185.18 marks in 1914); and in this outlay the federation participated to the extent of four fifths or 1,855.37 marks (2,548.10 in 1914), and the societies to that of one fifth or 463.80 marks (637.09 in 1914). The federation has not yet had to exercise its right, conferred on it by the by-laws, to make societies, which have had to pay extraordinarily high indemnities owing to bad farming, participate in payment for the excessive casualties to the extent of two fifths.

The total sum advanced by the federation to the societies during the five years for which the period of insurance lasts is covered by the societies' reserves. If they have no reserves — that is if *every* year their number of casualties be above the normal —, or if their reserves be insufficient — that is if their bad years have been more frequent than their good —, they are not bound to make special payments to cover the federation's advances. They have recourse to an expedient less felt by their members, namely they increase the premiums for the next period of insurance. The amount which a society pays to the federation is thus augmented, and *little by little* the debt contracted with the federation is redeemed by payments spread over five years and not by a single payment.

The proportion in which the premium is increased varies naturally with the size of the debt. In view of the ministerial aid given to the less wealthy societies, which have had to suffer particularly bad years through no fault of their own, this debt should never reach an exorbitant level, and there should be question only of a fraction added to the percentage payable as premium and of the payment of pfennigs (1) by the insurers. There are federations of which some societies have been able to reduce to 0.85 per cent. the rate of their premiums which was at first 2 per cent. The responsibility of societies for casualties surpassing the normal limit shows that they are no longer interested in the economical management of common funds. Precaution is justified ; for if the federation placed itself in a position to pay for all casualties surpassing the normal limit the societies might easily adopt such methods of administration that prudence and thrift would be the least of their cares. The largest reserve fund would be unable to hold out for long. To compensate for risks with the premiums of the various societies and within the federation is to give to the technique of insurance its one and only firm basis. It may be noted in this connection that the excess of casualties over the normal limit is influenced, in the societies and con-

(1) 1 pfennig = .01 mark.

sequently in the federation, by the fact that ministerial aid is given to societies having to face financial difficulties.

The total sum held by the societies was 3,517.41 marks in 1915, that is 0.95 per cent. of the insured value, and shows progress as compared with 1914 when it was 3,145.43 marks and 0.80 per cent. of the insured value. Only four societies are in debt to the federation and they are so to no important extent. All the others have reserve funds: some very small — 6.33 marks, other as much as 334.86 marks.

It should be mentioned that, contrary to its first intention of calling in advances only at the end of the period of insurance, the federation has decided, in order to avoid the consequent loss of interest, to ask the societies for repayment in future as soon as better times have brought them excess profits and made it possible for them to think of a repayment, however gradual, of their debts.

ITALY.

THE MUTUAL FUNDS FOR INSURANCE AGAINST THE ACCIDENTS OF AGRICULTURE.

SOURCES :

FERRARI (Prof. Prospero) *L'assicurazione contro gli infortuni sul lavoro in agricoltura* (Insurance against the accidents of agricultural labour), Rome, 1914.

ATTI DEL CONGRESSO PER LE MUTUE INFORTUNI SUL LAVORO, con statuti e istruzioni per la costituzione di casse mutue infortuni sul lavoro (Proceedings of the Congress of the Mutual Societies for the Accidents of Labour, with statutes and instructions for the constitution of mutual funds for the accidents of labour). Milan, 19 February 1911. National Committee of Agrarian Mutuality. Milan, Arti Grafiche, 1911.

STATUTES AND REPORTS OF THE VARIOUS MUTUAL FUNDS IN ITALY.

A recent vote of the general council of the *Istituto nazionale per la mutualità agraria*, that the government might present to the chamber as soon as possible the scheme for a law which would extend compulsory insurance against the accidents of labour to fieldworkers (1), has revived in Italy the discussion of this important problem which for long years

(1) See in this connection, *La Mutualità Agraria*, the organ of the *Istituto Nazionale per la Mutualità Agraria*, Rome, no. 24, 30 September 1916. Recently the General Labour Conference resolved as follows: "The directing council of the General Labour Conference will reaffirm the preceding votes as to the necessity for that comprehensive insurance of labourers against sickness, disablement and old age which will complete the insurance against accidents. It will press the government to promulgate the promised law as to the accidents of agriculture, taking into account the principal requests which the organizations have made from time to time namely:

a) that the insurance be compulsory and protect without distinction all tillers of the soil and farm labourers, including small labourer-proprietors.

b) that the right of agricultural labourers to insure against temporary disablement be recognized;

c) that insurance be entrusted to the compulsory mixed unions, their function being completed by the insurance of the National Accidents' Fund:

d) that simultaneously with the promulgation of the law as to the accidents of agriculture more equal representation be given to labourers, on the council and committee of the National Accidents' Fund.

has awaited a statutory solution (1). Pending legislation some proprietors and directors of agriculture have long provided spontaneously for the insurance of fieldworkers, having united for such end in special mutual societies. There are six of these: one at Vercelli which had the merit of being the pioneer in 1902, and the others at Florence, Milan, Turin, Bologna and Rome. Today when the question is again being mooted we think it useful to give some data as to their organization and that of societies of other kinds which do business in the same branch of insurance. We will thus show the manner in which private initiative has been able in Italy to face and to overcome difficulties both ingeniously and economically, in the absence of an organic law, and will show also the difficulty of the problem.

[§ I. THE MUTUAL FUND OF VERCELLI.

It was the *Associazione fra gli Agricoltori del Vercellese* (2) which in 1902 took the initiative in Italy in organizing insurance against the accidents of agriculture, even before in 1903 that law (29 June 1903, no. 243) had been promulgated which compels insurance in the case of several kinds of agricultural labour (threshing by machine, felling in woods, work done with the help of motors, etc). The *Associazione* instituted the Mutual Fund of Vercelli in the form of a co-operative society, and many agriculturists adhered to it. Impelled by a sentiment of humanity or a desire to free themselves from possible civil liability they thus guaranteed just indemnities in cases of accident to their dependents. The fund became active on 1 June 1903, insuring about 15,000 labourers for total wages which amounted to 3,000,000 liras a year. The law which has been mentioned was passed, and the fund, wishing to undertake the compulsory insurance it enacted, transformed itself into the fund of a union, legally recognized by a royal decree of 10 August 1904, and having by-laws which allowed it to extend its action to the agricultural labourers whom the law did not compel to be insured.

The fund indemnifies, in cases of death and of permanent disablement, whether total or partial, all workmen, both casual and permanently

(1) Many proposed laws tending to extend compulsory insurance against the accidents of labour to fieldworkers have at various times been brought before the Italian parliament, on the initiative of parliament and of the government. But for various reasons none of them has as yet been passed. The last was brought forward in December 1915 and was due to the deputies Borromeo, Venino and Belotti. See in this connection our article, "A New Bill for Compulsory Insurance against Accidents in Agricultural Labour", in our issue for June 1916, and the article of the deputy Bartoli Belotti, "Per l'assicurazione obbligatoria degli infortuni sul lavoro agricolo", in the *Nuova Antologia*, Rome, No. 1073, 1 October 1916.

(2) Association of Vercellese Agriculturists.

employed, in the measure fixed by the law for compulsory insurance (31 January 1904, no. 51) now in force, namely :

- 1) in the case of death an indemnity equal to five years' wages ;
- 2) in the case of total permanent disablement an indemnity equal to six years' wages and never less than 3,000 liras (1) ;
- 3) in the case of partial permanent disablement an indemnity equal to six times the amount by which the yearly wages have been or may be reduced, and never less than 500 liras.

Up to 1909 indemnification for temporary disablement was excluded. It was then admitted and extended to cover workmen not compelled by law to insure, and under this head about 2,600 liras was paid in 1913 in indemnities for 1,350 working days.

The sum of 239,412.05 liras was paid in ten years for various accidents as follows :

1904	liras 2,855.00	1909	liras 8,442.52
1905	» 10,248.00	1910	» 25,433.26
1906	» 15,568.35	1911	» 28,073.05
1907	» 23,855.12	1912	» 42,568.70
1908	» 17,839.90	1913	» 58,628.15

Premiums are fixed according to the area of the land and the cultivated land, and — reimbursements being taken into account — they have varied from 0.52 liras to 0.62 liras a hectare (2).

The chief merit of the Mutual Fund of Vercelli, apart from that attaching to the position of pioneer, is that it has based insurance not only on the value of the wages of each single labourer, but also on the sum of the labour required by a determined area according to the mode of its culture. Consequently a premium attaches to an area independently of any identification of particular labourers ; and therefore the pay-books and the registration of labourers, on which the institutions insuring industrial workmen insist, have been abolished.

When the amount of labour required for a crop has been determined as well as the area it occupies within a farm, the particular system of rotation of crops being taken into account, average sums for a hectare can be computed.

In Vercelli and adjacent lands these have been fixed at 157 liras and 175 liras a hectare. At the rate of 5 per cent. they give the amounts of the initial preventive premiums as 0.785 lira and 0.875 lira a hectare, which amounts have been reduced to 0.52 lira and 0.62 lira by the effect of reimbursements.

The financial year of the fund begins on 11 November and ends on 10 November, thus corresponding to the farming year. When the books are

(1) 15 = 1.2611 liras.

(2) 1 hectare = 2 acres 1 rood 35.383 poles.

balanced annually the difference between the receipts (premiums and any other sources of revenue) and the expenditure (payment of indemnities and administrative and other expenses) is, as to three tenths, assigned to a reserve fund, and is restored, as to seven tenths, to the members of the society proportionately to the premiums they have respectively paid. If there be a deficit the members are asked for a supplementary premium proportionate to that they have already paid. There may be no trespassing upon the reserve fund until it has attained to the sum of the premiums in the first year of the society's activity.

At first the fund's activity reached only the *arrondissement* of Vercelli; then it was extended to the *arrondissement* of Novara and to Lomellina, and thereafter successively to the *arrondissements* of Biella, Casale Monferato, Pavia and Abbiategrasso.

Only those may belong to it who are directly or indirectly engaged in agriculture, as farmers or agents. For admission a written application is necessary in which the total area of the land under cultivation must be stated. The whole number of the members constitute the society's general meeting. The society is administered by a directing council composed of a president and six members, elected by the general meeting by secret ballot and a majority of votes. The president holds office for three years and is always eligible for re-election. The other members of the council also hold office for three years: one third of them are elected every year and they are not eligible for re-election for a year after they have ceased to hold office. The general meeting also elects six arbiters, of whom three determine wages according to declared area and three pay indemnities. The arbiters hold office for three years, a third of them are elected every year, and they are always eligible for re-election. The meeting also elects annually from among the members three legal representatives and two deputies for these. All offices are unpaid, but the arbiters have the right to be reimbursed for expenses incurred in the course of their duties.

§ 2. THE MUTUAL FUND OF FLORENCE.

The mutual fund of the rural proprietors of Tuscany for the insurance of persons employed on farms against the accidents of labour (1), which has its offices at Florence, was constituted on the initiative of the local agrarian committee by a resolution of 4 December 1908 and received the status of a "moral body" by a royal decree of 25 February 1909. It began its activity on 5 April 1909, including within its scope all Tuscany, that is to say the provinces of Florence, Arezzo, Sienna, Lucca, Pisa, Livorno and Grosseto. The fund completed on 29 February 1916 its seventh year, and it appears from its last published report that at that date, which term-

(1) *Cassa mutua dei proprietari di fondi rustici in Toscana per l'assicurazione del personale delle aziende agrarie contro gli infortuni sul lavoro.*

inated its year of business, it had 768 enrolled members, and insured 961 farms which comprised 12,634 pieces of land having a total area of 318,607 hectares. The distribution according to the kinds of cultivation was as follows :

Sowed land, vines, olives	hectares	86,404
Sowed land only	"	53,650
Vines and special crops	"	2,464
Underwood	"	94,452
Forest trees	"	30,261
Fallow, pasture	"	51,376

This fund insures all persons, whether compelled to insure or not, who are employed in any kind of agricultural labour, permanently or casually ; and since almost everywhere lands are held on the *métayage* system, the insurance comes to comprise not only all the members of the cultivators' families but also all the casual labourers, the *braccianti*, and the labourers employed on building, forestry, threshing etc :

The total number of these persons was computed on 28 February 1915 to be 119,938 cultivators, of whom 44,455 were males over thirteen, 34,931 adult women, 32,192 men and women over sixty-five, and 8,360 boys under thirteen whom the insurance did not cover. There were also about 6,800 casual labourers who were enrolled by the fund.

The annual premium is fixed according to the area of the farm, the various types of cultivation being taken into account, as well as the relation between the area and the rural population, and special risks attaching to any type of cultivation, to operations for the conversion of products, or to the use of machines etc.

The complexity and the variety of agrarian conditions in the different Tuscan provinces has rendered it necessary to establish tariffs or premiums varying from 0.30 lira to 1.50 liras a hectare for lands bearing grass crops, and joined to lands on which plants of the tree family are grown ; while fixed premiums of 0.40 lira and 0.20 lira have been adopted in the case of woods and underwoods.

Since 1914 premiums have been reduced by 20 per cent., the result of previous years allowing such reduction to be effected without danger to the safety of the Mutual Fund. This fund has further provided for the constitution of a reserve formed from admission fees of 0.10 lira for each hectare of cultivated land and of 0.05 lira for each hectare of woodland and pasture, and from the interest on the sums on deposit. At the end of the seventh year of the Mutual Fund, that is on 29 February 1916, such reserve amounted to 124,035.44 liras, and this when joined to a special reserve of 10,000 liras gives a sum of 134,035.44 liras,

The Mutual Fund of Florence indemnifies, in cases of death and total or partial permanent disablement, anyone incurring such in the course of

labour (1), whether or not he be compelled to insure. It also pays indemnities to persons temporarily disabled in the course of labour, but only if they be subject to the obligation to insure. However in the case of grave accidents, happening to labourers who are not compelled to insure and entailing expenses for hospital or other medical treatment and prolonged temporary disablement, the fund grants fitting subsidies.

These indemnities are payable to the victims of accidents arising in the course of labour who are not subject to the obligation to insure. To those within the scope of the law of 31 January 1904, no. 51, as to accidents of labour, indemnities are paid at the rate of six times the amount of annual wages for permanent total disablement, and five times their amount for death. From 1909 to 1915 indemnities paid in response to the claims which were met amounted to 361,438.17 liras, namely :

Year	Claims Met.	Indemnities Paid. Liras.
1909	92	9,995.46
1910	220	25,363.73
1911	328	49,850.49
1912	410	62,740.10
1913	513	81,722.81
1914	547	97,978.78
1915	318	33,786.80
Total . . .	2,428	361,438.17

The classification of the causes of the accidents has a certain value because statistics of this description are almost entirely lacking. The data as to the Mutual Fund of Florence, which we here reproduce, explain its activity in a district of very complex agriculture and have therefore a particular importance. The kinds of labour in the course of which accidents were incurred were as follows :

(1) If a member meet with an accident he must notify the fact on a special form, on the back of which the doctor must give the necessary facts as to the nature of the injury and its consequences and the term of disablement. In the case of every accident the member is obliged to bear the cost of the first medical certificate and attendance. When the doctor's certificate testifies that the victim has been permanently disabled the Mutual Fund invites him to receive a visit from the fund's skilled doctors, who together investigate and estimate the degree of partial disablement, the corresponding deduction in labour power, and the indemnity due.

Accidents distributed according to the labour which caused them.

	I 1909-10	II 1910-11	III 1911-12	IV 1912-13	V 1913-14	VI 1914-15	VII 1915-16	Total
Woodcutting	43	111	162	166	170	223	202	1077
Falls from carts, transport.	23	41	60	86	89	88	80	467
Falls from trees, pruning .	17	24	56	68	85	99	94	443
Building	16	53	73	73	77	80	63	435
Work in cellars	14	12	16	35	52	59	15	203
Work of herds	13	22	26	59	73	76	51	320
Cutting forage	11	16	26	30	40	46	39	208
Falls in general	10	25	51	37	78	100	90	391
Tilling soil, bringing it under cultivation	10	18	58	38	53	78	53	308
Harvest and hay harvest .	8	44	48	69	58	63	74	364
Various agricultural labour.	5	23	18	28	75	112	60	321
Threshing	5	20	17	44	40	40	20	186
Quarries, claypits	3	6	4	14	22	15	15	79
Presses, mills	3	4	8	9	6	18	12	60
Carpenter's work	1	6	10	9	14	13	16	69
Supervision and keeper's work	2	6	2	5	6	8	9	38
Various causes	6	12	24	18	20	30	26	136
Total . . .	190	443	659	788	958	1148	919	5105

From this complexity of facts the rich economic and social results to which the Mutual Fund of Florence has attained can easily be understood, results which have had the great merit of introducing Tuscan agriculturists to the principle of mutuality, and of stimulating the métayer's activity by interesting him and by binding him more closely to the soil which he tills.

§ 3. THE MUTUAL FUND OF MILAN.

The Lombard Mutual Fund for Insurance against the Accidents of Agricultural Labour (I) was founded on the initiative of the local association of proprietors and managers of properties. It sby-laws date from 21 May 1910 and it began its activity in November of the same year.

(1) *Cassa mutua lombarda di Assicurazione contro gli infortuni sul lavoro nell'agricoltura.*

Its activity extends over the Lombard district which presents a great variety of forms of agriculture. Subsequently to its foundation it fixed its annual premiums, based on area, in accordance with these forms and the respective risks they entail.

The insurance covers cases of death and of permanent total disablement; partial disablement is not considered unless it is equal to ten per cent. of total disablement; indemnities are paid after twenty-one days for temporary total disablement.

The indemnities are as follows: in case of death — to a man 2,000 liras, to a woman 1,000 liras, to a child 500 liras; in case of permanent total disablement — to a man 2,500 liras, to a woman or child 1,200 liras; in case of temporary disablement — 1 lira a day to a man, 0.50 lira a day to a woman or child, the latter being defined as a person between twelve and eighteen years old.

At the end of 1914 the fund had 416 members. In this year claims were made for 207 accidents and 183 of them were acknowledged. Of these 176 were met by temporary indemnities which amounted to 3,919 liras; one non-indemnifiable fatal accident caused a grant of 400 liras; and six claims on account of permanent partial disablement were indemnified by a total sum of 1,040 liras. The victims included thirty children, 161 men and sixteen women, their ages being as follows:

from 18 to 20 years	17	from 61 to 65 years	7
" 21 to 30 years	38	more than 65 years	7
" 31 to 45 years	49	of indefinite age	13
" 46 to 60 years	46	children from	
		12 to 14 years	30

The accidents occurred in the months in which work was most intense and in which special works, such as the rearing of silkworms, are usually accomplished.

The classification of the causes of accidents is peculiarly important. It results from it, according to the opinion of experts, that the gravest risk in agriculture is not so much one due to the use of machines as a risk inherent in the very nature of the industry. Thus fifty-six accidents occurred through falls from carts or haylofts, thirty-seven were attendant on herding animals, twenty-five on transporting products, fourteen on the labours of the hay-harvest and nine on those of forestry, while only thirteen out of 207 involved injuries by agricultural machines or implements.

The injuries which had such origins affected different parts of the body as follows:

feet	51 accidents	arms	16 accidents
hands	46 "	head	8 "
trunk	38 "	face	6 "
legs	38 "	eyes	3 "
		groin	1 "

The statistics as to indemnities are as follows:

	Years			
	1910-11	1911-12	1912-13	1913-14
For death	—	—	—	1
" permanent disablement	—	1	5	6
" temporary disablement	—	6	57	176
Without indemnity	5	—	—	5
Pending decision	—	—	1	19
Total	5	7	63	207

If it be taken into account that in four years 10,623.19 liras was paid and 1,670 liras was put on one side for accidents as to which a decision was pending, it results that an accident implied in general an average cost of 39 liras, to which must be added 3 liras for expenses, giving a total of 42 liras. Finally if we compute the cost of accidents according to their consequences we find that, in addition to expenses, the average cost of temporary disablement was 26.50 liras, of permanent disablement 258 liras.

§ 4. THE MUTUAL FUNDS OF TURIN, BOLOGNA AND ROME.

Following the example of the funds of Vercelli, Florence and Milan, three others, of which we will speak briefly, soon arose.

The Piedmontese Mutual Agricultural Insurance (1). — On the initiative of the Piedmontese Agricultural Co-operative Syndicate this fund was instituted by a resolution of 20 June 1910 for mutual insurance against the accidents of labour, especially in the provinces of Turin, Alexandria and Cuneo. Its working is like that of the Milanese fund.

The Mutual Agrarian Accidents' Society of Bologna (2). — This society was promoted by the Interprovincial Agrarian Federation, was constituted by a resolution of 21 April 1910 and was authorized by a royal decree of 11 May 1910. Its activity extends especially to the provinces of Bologna, Rovigo, Mantua, Ferrara, Modena, Ravenna and Parma. It follows almost the same rules as the funds of Vercelli, Florence and Milan. Premiums are paid proportionately to the area of the insured land and in the society's last year of business varied from 0.10 lira to 0.50 lira the hectare. This figure covers the insurance of labourers bound to insure (those employed on threshing machines, on steam forage-presses, on wood-cutting etc.) and that of those not subject to such compulsion.

In the case of special works or of factories for the conversion of agri-

(1) *L'Assicurazione Mutua Agricola Piemontese.*

(2) *La Mutua Agraria Infortuni di Bologna.*

cultural products an additional premium is paid, proportionate to the increase of the risk.

Members who, according to local custom, take their own machines to work on the land of other members need pay no supplementary premium; but if they thus work on land of which the owner is not a member they must pay a slight supplement.

The indemnity paid to labourers who are the victims of accidents varies according to whether or not they be subject to the compulsion to insure.

If they be thus compelled, the indemnity is that fixed by the law. If they be not thus compelled the indemnity is fixed as follows: in case of death 2,500 liras; in case of permanent total disablement 3,000 liras; in case of permanent partial disablement a fraction of 3,000 liras proportionate to the reduction of working power.

Insurance against cases of temporary disablement are not included, but members who apply for it can obtain it by paying an additional premium of 70 per cent.

This mutual fund also guarantees its members, in return for a small additional premium, against all liability they may incur by their own acts or those of their dependents, whether towards labourers employed on their farms or in any other case contemplated by the civil code.

The Roman Mutual Fund for Insurance against the Accidents of Agricultural Labour (1) This fund, which was constituted on the initiative of the Agrarian Committee of Rome by a resolution of 1 July 1914, extends its activity over the Roman province. It became active in November 1914, following the rules of other mutual funds except in the matter of indemnities which are fixed by the by-laws as follows: in cases of death, 2,000 liras for a man and 1,200 liras for a woman; in cases of total permanent disablement, 2,500 liras for a man and 1,200 liras for a woman or a child between twelve and eighteen years old. Indemnities are paid for permanent partial disablement only if full working capacity have been reduced by 20 per cent.

§ 5. THE PRIVATE SOCIETIES FOR INSURANCE AGAINST ACCIDENTS.

In the preceding paragraphs we have briefly shown the organization of the mutual funds for insurance against the accidents of agriculture which were founded on the initiative of various agricultural associations. It is necessary also to indicate the manner in which the same insurance is effected by private societies, on the system of premiums proportionate to area and collective policies.

Assicuratrice Italiana (Italian Insurance Society). — This society, which has its offices at Milan, instituted at the end of 1908 insurance policies for all the labour of a farm, whether or not works which compelled insurance were practised on it. Premiums are fixed by contract, proportionately

(1) *La Cassa Mutua Romana di Assicurazione contro gli infortuni sul lavoro nell'agricoltura.*

to the cultivated area and the kinds of cultivation, the basic premium of 2 liras a hectare being capable of reduction when the agriculture is not very intensive. Indemnities are paid in accordance with contracts. They vary from 2,000 liras to 3,000 liras in the case of death, according to the kind of work on which the victim was engaged; from 2,500 liras to 4,000 liras in the case of permanent total disablement; and from 1.50 liras to 2.50 liras a day in the case of temporary total disablement.

Among insurance societies this one has the merit of having been the first to deal with the optional insurance of agricultural labours by making premiums proportionate to areas, and thus eliminating the obligation to keep pay-books and registers which is burdensome to agriculture.

Società anonima italiana di assicurazioni contro gli infortuni (Italian Joint Stock Society for Insurance against Accidents, Milan) : — This society in 1905 extended its activity to accidents in the course of agricultural labour not subject to the obligation to insure, charging a premium proportionate to the cultivated area. It pays in the case of death an indemnity equal to 1500 times the daily wage of the victim up to a maximum of 2,500 liras; in the case of permanent total disablement one equal to 1800 times such wage up to a maximum of 3,000 liras; and in the case of temporary disablement one lira a day.

Unione Interprovinciale Agricola (Cremona). — This society began to insure against the accidents of agriculture in 1907, charging 1.50 liras for a hectare of land. This sum was afterwards reduced to 0.75 lira. An indemnity of 1500 liras is paid in case of death and one of 2,000 liras in case of permanent total disablement; while in the case of temporary disablement one lira a day is paid to the head of a family and 0.50 lira to its other members for a period limited to six months.

La Fondiaria (The Land Society), Florence. — This society, well known for its insurance of life and against hail and fire, undertook in 1910 the collective insurance of agricultural labour, charging premiums varying from 0.90 lira to 2.25 liras according to the risk and the type of policy. The average premium is 1.25 liras a hectare.

Indemnities are fixed as follows : in case of death 2,000 liras for a man and 1,000 liras for a woman; in case of permanent total disablement 2,500 liras for a man and 1,200 liras for a woman; in case of permanent partial disablement an indemnity proportionate to the reduction in working capacity if this be not of more than 20 per cent.; in case of temporary disablement one lira a day.

Insurance to which such premiums and indemnities attach refers exclusively to agriculturists and labourers employed on agriculture, other than those contemplated by the law of 31 January 1904, No. 51, (persons employed on threshing, woodcutting, motor machines) whom it is necessary specially to insure with the society.

Cassa Nazionale di Assicurazione per gli infortuni degli Operai sul lavoro (National Fund for Insurance against the Accidents occurring to Work-people in the course of Labour), Rome. — This institution, which has a public character, was formed by the law of 8 July 1883, No. 1473. It is the

official agency for insurance against the accidents of labour and industry, and it was authorized by the royal decree of 14 May 1914, No. 547, to effect, experimentally, insurance against accidents to labourers employed on farm work not contemplated by the law, already cited, of 31 January 1904, No. 51. The insurance implies the premiums and indemnities which we shall mention.

Following the example of the mutual funds the National Fund adopted a tariff proportionate to area. The premiums payable on a hectare are fixed according to the kinds of cultivation and are given in the appended table. They vary from 0.75 lira to 3 liras a hectare in the case of grass crops; from 1.50 to 6 liras a hectare where plants of the tree family are cultivated; from 0.80 lira to 1.60 liras a hectare, without distinction among risks, for rotatory crops; from 1.25 liras to 2.50 liras for woods of forest trees; and from 0.75 lira to 1.50 liras for underwood.

These diverse premiums attach to three types of insurance which entail maximum, medium and minimum indemnities, as follows:

		Indemnities		
		Maximum	Medium	Minimum
<i>In case of death:</i>				
Men	liras	2,000	2,000	2,000
Women	"	1,000	1,000	1,000
Children and old people	"	500	500	500

<i>In case of permanent total disablement:</i>				
Men	"	2,500	2,500	2,500
Women	"	1,200	1,200	1,200
Children and old people				

<i>In case of permanent partial disablement:</i>			
Men	} No indemnities	No indemnities	No indemnities
Women		of less than	of less than
Children and old people		5 per cent.	11 per cent.

<i>In case of temporary disablement:</i>			
Men 1 lira	} If disabled for more than 5 days	If disabled for more than 20 days	No indemnity.
Women 0.5 "			
Children and old people —			

<i>Relief for 90 days in case of sickness:</i>			
Men 1 lira	No	No	
Women 0.50 "	indem-	indem-	
Children and old people 0.50 "	nity.	nity.	

Children are taken to include persons between nine and fifteen years old, men and women persons between fifteen and seventy, and old people those over seventy.

These indemnities are due only in the case of accidents which occur in the course of agricultural labour or by violent means connected with such labour. All persons within the scope of the existing law as to accidents are excluded from the insurance unless a special contract be made to insure them.

Sindacato per l'assicurazione mutua degli operai contro gli infortuni sul lavoro fra gli imprenditori di tagli di boschi (Syndicate of woodcutting contractors for the mutual insurance of workmen against the accidents of labour), Rome. — As is known, the law of 31 January 1904 included woodcutting among the works in the case of which insurance is compulsory, if the labourers employed on it numbered more than five. The relevant tariff was however fixed at the somewhat high rate of 90 liras for every thousand liras of wages.

The syndicate in question was formed by a resolution of 20 February 1905 and began its activity on 15 March of the same year. Its by-laws rule that it pay indemnities in the measure fixed by the law, that is five times the annual wage in case of death, six times the annual wage in case of permanent total disablement, and half his daily wages to a man who is temporarily disabled.

Members pay for each labourer they employ a cautionary fee of 10 liras, and a monthly premium equivalent to from 25 to 30 liras for each thousand liras of wages, according to whether the men are employed on making cross-beams or staves or on woodcutting, charcoal burning, etc.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

AUSTRIA AND HUNGARY.

THE INSURANCE OF TOBACCO PLANTATIONS AGAINST HAIL, IN BOSNIA AND HERZEGOVINA. — *Wiener Landwirtschaftliche Zeitung* (Viennese Agricultural Journal) Vienna, No. 79, 30 September 1916.

For many years an endeavour has been made to solve the problem of insuring tobacco plantations against hail in Herzegovina, where the tobacco harvest and the vintage may be said to supply the rural population with the whole of their revenue. Since for fiscal reasons the tobacco monopoly could not consider indemnifying for damages by paying a higher price for tobacco, some other means of protecting the tobacco planters against the loss caused by such natural causes as hail had to be chosen.

At first no scheme of the sort could be realized owing to the conservatism of the native producers. Only a comparatively small number of the communes which grew tobacco decided to enter into voluntary contracts for insurance against hail. In 1910, therefore, an ordinance compelled all the planters of the *régie* of Bosnia-Herzegovina to insure their tobacco plantations. The following are the chief provisions of this ordinance:

Insurance of tobacco plantations against damage by hail is obligatory for planters of the *régie* and is based on the principle of mutuality. Broadly, the following are the chief features of the system. When the planters deliver their tobacco to the *régie* they pay a quota thereof, proportionate to the quantity they deliver, into an insurance fund. The premiums thus have the form of deductions from their normal profits. The sums intended to indemnify them for losses by hail are taken from this insurance fund, the damage sustained being estimated by valuation.

The insurance premium is 1 per cent. of the normal return made by the monopoly for the tobacco, and is paid, as has been said, into the insurance fund. If however such premiums do not suffice to compensate for the damage, they may be increased until they are equal to 3 per cent. of the return. The weakening of the insurance fund by the payment of indemnities is counterbalanced by loans bearing no interest from the provincial treasury.

If when the premium-quota has been raised to 3 per cent. obligations can still not be met — that is if losses cannot be indemnified and loans

repaid — the amount of losses, as established by the accounts department, must not be covered fully but only to the extent of a percentage to be determined by the ratio existing between resources and obligations. If on the other hand the insurance fund reach dimensions which more than allow all obligations to be discharged, the premium-quota may be reduced, or obligations may be increased so as to protect the tobacco plantations against damage by wind.

An eventual distribution of the tobacco growing communes into zones of more or less risk is contemplated, so that the highest premiums will be paid in the districts most exposed to damage by hail and the lowest in the most favoured and sheltered districts.

The technical and administrative documents attaching to this system of insurance are the responsibility of the agencies and offices of the State, and the insurance fund may incur no charge in connection with them.

Notice of damage by hail to tobacco plantations must be given within forty-eight hours of its occurrence to the competent department; which must investigate the loss and communicate the results so obtained to the competent official of the *régie*. Tobacco leaves and fragments of them which have been injured by hail must — when they have been collected, treated and dried according to the instructions of the offices of the tobacco *régie* — be carefully separated from the intact portion of the harvest, and thus delivered, at the same time as the rest of the harvest, to the commission of purchase.

The damage caused by hail is held to be equivalent to the difference between the actual sum paid for tobacco which has suffered from hail, and the value of the normal intact crop, determined by its estimated quality and quantity, that is the value of the crop if no hail had fallen on it.

The quality and quantity of the crop are estimated by technical officials of the commission of purchase in co-operation with a person of trust.

If the planter dispute their estimate another is made, a new person of trust, who is chosen by the president of the commission, taking part in it. In case of a necessity for a third estimate he is chosen by the management of the tobacco *régie*.

As early as 1910 it was found that the premium-quota of 1 per cent. was far from adequate to the payment of the estimated losses, and the provincial treasury had to advance a round sum of 100,000 crowns (1) as a loan without interest repayable in three annual instalments, to the insurance fund. Consequently in the following year (1911) the premium-quota was raised to 3 per cent. at which level it has remained.

The population are beginning to appreciate the advantages of this system of insurance more and more. It should be regarded as a first attempt to protect the tobacco planter against the elements. Experience will lead to an adaptation of insurance to real needs and to an improvement

(1) Austrian crown of gold = $10 \frac{4}{25}$ d at par.

which will profit the *régie* as much as the planters. The following are the views on this subjects of the writer of the article :

1. The planter should be made secure of indemnification for all loss occasioned by hail, and not only of a compensation fixed when the tobacco is bought. That is not the time for an estimate by the technical official of the loss occasioned by a fall of hail in July.

2. The valuation of the crop — that is to say the estimate of the probable crop — is made by the financial insurance departments together with experts chosen from the population, and is revised by officials of the *régie*. If the fall of hail occur after this estimate has been made the future sale and the quality of the crop can be computed. There is here an indication as to the manner in which losses should likewise be determined.

3. Although there is much to criticize and to blame in this manner of determining the crop it yet gives the official responsible for computing the damage some opportunity of fixing it near its real figure. But if the fall of hail occur before the estimate has been made the question appears in quite another light. How can the normal crop then be determined? An estimate can be based only on the trustworthy evidence of the oldest planters, for in some cases the crops on parcels of land are literally raised to the ground.

4. The purchase of the merchandise by the *régie* and the determination of damages should be effected rapidly, for the work to be done is considerable. It is impossible to generalize on this subject, yet it may be said that to use data as to the average yield of a commune incurring damage over a period of five or ten years would give a much firmer and a juster basis of valuation. An average figure of this sort would also be generally profitable to the stability of the insurance fund, and would meet a certain scepticism on the part of the planters as to official estimates. The figures as to losses thus obtained would not be subject to variation.

GERMANY.

1. THE BADEN ASSOCIATION FOR INSURANCE AGAINST MORTALITY AMONG LIVE STOCK IN 1915. — *Deutsche Schlacht und Viehhof-Zeitung*. Berlin, 16 August 1916.

At the end of 1915 this association numbered 451 societies and local funds. During the year one fund, formed by fifty-seven members and insuring 321 heads of live stock, resigned, but the adherence of a new society, having seventy-nine members and insuring 301 heads of live stock, was recorded.

In 1915 the insurance covered altogether 168,419 heads of live stock and indemnities were paid in 4,410 cases. Losses amounted thus to 2.62 per cent. and were higher by 0.15 per cent. than in the preceding year, a fact due to different causes — insufficient care of the animals owing to the absence of owners, scarcity of certain articles of food, impossibility of procuring veterinary attention, spread of apthous fever.

The claims for indemnities numbered 4,548, and of them 4,248 or 94.13 per cent. were justified, 129 or 2.84 per cent. (0.16 per cent more than in 1914) were partially so, and 138 or 3.03 per cent (2.18 per cent. less than in the previous year) were unjustified. The total sum of indemnities for which local funds became liable, as a result of claims not or only partially recognized, was 24,431.22 marks (1), of which amount 2,169.16 marks was recovered as the product of the sale of the remains of the animals.

Of the 4,410 heads of cattle for which indemnities were paid :

3,745	or	84.92	per cent.	were slaughtered for urgent reasons,
430	"	9.75	"	died,
235	"	5.33	"	were slaughtered normally (insurance of live
				stock raised for butchery by Article 40
4,410		100.00		of the law).

The number of cases in which animals were slaughtered for urgent reasons fell by 3.15 per cent. as compared with 1914, that of those which died rose by 2.62 per cent. and that of the insured animals slaughtered normally rose by 0.53 per cent.

Animals slain for urgent reasons:

	No. of Cases	Percent.	No. of Cases	Percent.
After treatment or examination by a veterinary surgeon	3,068	81.92	3,745	89.70
Without treatment or examination by a veterinary surgeon	677	18.08		

Animals which died:

After treatment or examination by a veterinary surgeon	118	27.44	430	10.30
Without treatment or examination by a veterinary surgeon	312	72.46		
			4,175	100.00

The number of animals treated or examined before death by a veterinary surgeon was less by 19.30 per cent. than in the previous year, namely by 8.51 per cent. of cases of slaughter for urgent reasons and by 10.79 per cent. of cases of natural deaths.

The following table gives the causes of death or of urgent slaughter in the case of 4,175 insured heads of live stock for which indemnities were paid.

(1) 1 mark = about 1s at par.

	Number of Deaths	Percentage	Order
I. Contagious and infectious diseases	692	16.57	3
II. Diseases of the nervous system. .	141	3.38	7
III. " " " respiratory organs	122	2.92	9
IV. " " " digestive . .	1,408	33.72	1
V. " " " circulation	79	1.89	11
VI. " " " urinary organs . .	129	3.09	8
VII. " " " sexual " . .	777	18.61	2
VIII. " " " locomotive " . .	240	5.75	4
IX. " " " skin	24	0.58	12
X. Poisoning	8	0.19	14
XI. Tumours and constitutional defects	206	4.93	6
XII. Animal parasites.	108	2.59	10
XIII. Exterior causes	217	5.20	5
XIV. Undetermined causes.	24	0.58	13
	<hr/> 4,175	<hr/> 100.00	
Cases of indemnities paid for insured animals raised for butchery	235		
	<hr/> 4,410		

The most numerous deaths were caused, as in 1914, by diseases of the digestive organs, namely 1,408 or 33.72 of the whole number, which gives an increase of 0.24 per cent. Of these 1,408 deaths 594 were due to diseases caused by foreign bodies. Deaths due to flatulence among live stock also increased notably, the reason for which must be sought in the fact that in many cases feeding had to be left to inexperienced persons incapable of correctly regulating the amount of nourishment given to animals.

Diseases of the sexual organs occupy the second place as having caused 777 deaths, that is 18.61 per cent. of their total number, or less by 2.47 per cent. than in 1914 when such percentage was 21.08.

Contagious and infectious diseases account for 692 deaths or 16.57 per cent. of the whole number, showing an increase of 1.07 per cent. on 1914.

Included among them are :

a) *Tuberculosis* which alone caused 390 deaths. This figure excludes 235 cases of tuberculosis found among animals normally slaughtered. Thus the total number of deaths due to tuberculosis was 625, or 14.17 per cent. of all the deaths. The figure shows an increase of 12.24 per cent. as compared with that of the previous year.

The increase is due, among other causes, to remissness caused by the war in the superintendence of the inspecting veterinary surgeons, employed by the State for the campaign against tuberculosis.

b) *Aphthous fever*. The number of deaths caused by this disease have increased from the forty cases reported last year to 124.

The increase in the deaths from osteopathyrosis (fragility of bones) is even more pronounced, their number actually surpassing that for 1914 by 100 per cent. The number of indemnities paid in cases of general dropsy has increased, as compared with that of 1914, by 200 per cent. The cause of these diseases is connected with feeding and should be looked for in the insufficient feeding which has resulted on the scarcity of concentrated forage, especially in the case of young animals.

* * *

2. INSURANCE AGAINST HAIL, IN THE PRINCIPALITY OF HOHENZOLLERN IN 1915-1916. — *Mitteilungen der Centralstelle für Landwirtschaft und Gewerbe in Hohenzollern*. Sigmaringen, 5 April 1916.

The following table shows the development of insurance against hail in the principality of Hohenzollern as a consequence of the preferential contract concluded at Berlin from 15 to 23 May 1900 by the Provincial Commission (*Landesausschuss*) with the Mutual Association for Insurance against Hail of North Germany :

Administrative Sphere	Number of Policies	Number of subscribers	Insured Value (in marks)	Premiums (in marks)	Insured Area (in hectares) (1)
Sigmaringen. . .	1,369	1,405	2,831,642	28,163	5,651
Hechingen. . .	1,003	1,034	955,472	10,478	1,599
Gammertingen. . .	471	493	1,047,905	10,671	2,242
Haigerloch. . . .	268	807	835,458	6,995	1,417
1915	3,111	3,739	5,670,477	56,307	10,909
1914	2,693	3,236	4,437,419	—	9,643
Increase in 1915. .	418	483	1,233,058	—	1,266

As regards the number of claims met and the amount of indemnities, it should be noted that 1915, like the two preceding years, was among the most unfortunate years ever encountered in the principality of Hohenzollern. The following are the figures of the balance-sheet which refer to the claims met :

(1) 1 hectare = 2 acres 1 rood 35.383 poles.

Administrative Sphere	Number of Claims met	Number of Pieces of Land injured by Hail	Area injured by Hail (in hectares)	Amount of Indemnities (in marks)
Sigmaringen	628	2,985	1,512	160,190
Hechingen.	255	897	134	20,511
Gammertingen	139	913	324	34,493
Hagerloch	39	154	20	3,432
1915.	1,061	4,949	1,990	218,626
1914.	612	5,700	1,482	206,503
1913.	545	4,837	1,514	102,677

Thanks to the particularly favourable atmospheric conditions, which have prevailed throughout the greater part of the sphere of activity of the Association for Mutual Insurance against Hail of North Germany, and thanks also to the administrative provisions of some years ago for the formation of reserve funds, the association has been able, for the first time in twenty years, to avoid a levy of additional premiums.

This result is the more satisfactory because the total sum paid in indemnities is very high.

SWITZERLAND.

INSURANCE AGAINST HAIL, IN 1915. — *Schweizerisches Finanz-Jahrbuch*, 1916, 17th year, Beine, Neumann and Zimmermann, 1916.

We have already in another issue of this Review dealt with the Swiss Financial Yearbook for 1916, the sixth part of which is given up to insurance. Of the different branches of insurance — life, accident, fire and transport insurance and reinsurance — it is insurance against hail which furnishes the facts most interesting to us. This form of insurance, which we have studied in numerous articles in this Review (1), has its place in this yearbook.

As is already known insurance against hail is afforded in Switzerland by two mutual aid societies: the *Schweizerische Hagel-Versicherungsgesellschaft* of Zurich and the *Paragrêle* of Neuchâtel. The former of these extends its activities over the whole territory of the Confederation and insures all agricultural products against the risks of hail; the latter limits its action to the canton of Neuchâtel where moreover it insures only vineyards against hail.

(1) *Monthly Bulletin of Economic and Social Intelligence*, November 1915, "Agricultural Insurance in Switzerland in 1913".

The Zurich society reports having received premiums in 1915 to the amount of 1,298,096 francs ; the *Paragrêle* to the amount of 34,007 francs. These figures are much the same as those for the previous year. Damages amounted for the former society to 1,392,482 francs, for the latter to 316 francs. The Zurich society, which closed its year's accounts with a loss of 116,921 francs, was informed of some 9000 cases of loss, 1,327 occurring on the single day of 2 August. On this occasion its reserve fund was of great use to it. This had in the previous year been augmented by 603,393 francs derived from surplus receipts. To meet the needs of 1915 the society drew on it to the extent of 305,662 francs. Its amount at the end of 1915 was 4,490,822 francs as against 3,832,510 francs at the end of 1910.

The year 1915 was very profitable to the *Paragrêle* which was apprised during its course of only one case of loss. Its reserve fund, already augmented by 9,000 francs in 1914, received almost the total sum of the premiums. This happy event brought its total to 108,750 francs, as against the total of 66,750 francs to which it had been reduced at the end of 1913.

NOTICES OF SOME RECENT PUBLICATIONS CONCERNING INSURANCE AND THRIFT.

ITALY.

MAGALDI (V.): *L'Istituto Nazionale delle Assicurazioni*. Extract from the *Rassegna d'Assicurazione e Previdenza Sociale*, 3rd year, 16 July 1916, 16 pages.

In this interesting pamphlet the author, who for many years has so competently filled the office of General Director of Credit and Thrift in the Ministry of Agriculture, Industry and Commerce, shows that insurance — and especially life insurance — has everywhere greatly developed, and that State intervention has seemed necessary for the regulation of its conditions. The legitimate nature of such intervention follows on the fact that free competition does not suffice to prevent the constitution of insurance enterprises which do not technically reach the standard of today and which, by their lack of frankness or even of good faith, cause bitter disappointments to the insured persons and thus impede the growth of thrift. Moreover insurance institutions need careful watching, for they accumulate large capitals which in truth represent the savings of individuals. In Europe the point has not been reached of creating by law public institutions charged to insure individuals, save in the case of several tentative efforts, as in Bavaria where by the law of 13 February 1884 a public State institution was formed to insure against damage by hail, and in Switzerland where the compulsory insurance against fire is exercised under the rule of the State monopoly. In Italy a typical example of institutions of this kind is given by the *Istituto nazionale delle assicurazioni*, formed by the law of 4 April 1912. This institution enjoys the conditions of a monopoly and practises life insurance in every possible form, the authorization given to private firms, which were legally practising such insurance on 31 December 1911, to continue their activity for ten years from the date of the said law being safeguarded. This national institution, of which this pamphlet makes clear the most salient characteristics, began work on 1 January 1913, when it insured capital of the value of 800 million francs, ceded to it by the various Italian and foreign companies which had ceased to operate in Italy.

Part III: Credit

URUGUAY.

THE MORTGAGE BANK AND ITS ACTIVITY IN RELATION TO LAND CREDIT IN 1915-1916.

SOURCES :

DE UNA RELACIÓN ENVIADA POR LA OFICINA DE ESTADÍSTICA y Publicaciones del Ministerio de Industrias de la República Oriental del Uruguay al Instituto Internacional de Agricultura (*Report sent to the International Institute of Agriculture by the Bureau of Statistics with the publications of the Ministry of Industry of the Eastern Republic of Uruguay*).

Recently we gave some notes on that reorganization of the Mortgage Bank of Uruguay which was decided by the law of 15 October 1915 (1). We then made clear that the essential bases on which the reform of the organization of this establishment was framed were the simultaneous extension of its function in the same direction as that of modern banks, and reinforcement of the safeguards tending to ensure its financial soundness.

We will now examine, with the aid of some data sent to us directly by the Ministry of Industry of Montevideo, the results of the activity of this bank in the year 1915-1916 in relation to land credit, with which subject the reform is especially concerned. The figures which we will give cannot of course afford an exact idea of the influence which the reorganization in question may have on transactions, for, as has been said, the law enforcing it was promulgated in October 1915, that is to say when the financial year to which these figures refer was half over. But the figures will

(1) See *International Review of Agricultural Economics*, August 1916, page 78.

serve to show the importance of those transactions of the bank which are concerned with land, and also what the bank has done to lessen the disturbance of the national economy of Uruguay due to local factors, and, even more importantly, to the European conflagration which has profoundly affected all credit transactions in the country.

When we come to examine the increase in the operations in land credit conducted by this institution, we find that during the year 1915-1916 the bank made loans of a total value of 3,562,400 pesos (1) as against 2,032,700 pesos in the preceding year, which gives an increase of 1,529,700 pesos or 75 per cent. This increase is yet more conspicuous if it be remembered that in the year 1914-1915 the requests for rural loans received by the bank from individuals were for a total amount of 5,140,400 pesos and the amount lent was, as has been said, 2,032,700 pesos, while in the year 1915-1916 the total requests were for 8,404,100 pesos and the sums lent amounted to 3,562,400 pesos. Thus in 1914-1915 the loans actually made represented 39 per cent. of those for which application was made, and in 1915-1916 42 per cent., a circumstance which proves that the increase in the loans granted last year, as compared with those granted in the preceding year, was due not to greater willingness to accord them but to a greater demand for them.

During the year under review the bank granted 157 loans secured by rural mortgages. The average sum lent was 21.62 pesos a hectare (2), and the average annual interest on mortgages was 1.73 pesos. These averages calculated on the hectare, and corresponding to the value of the mortgaged properties as fixed by the bank's experts and to their annual returns, were 49.29 pesos and 1.99 pesos.

The following table gives detailed data with regard to the mortgages realized by the bank in the nineteen departments of the republic of Uruguay.

(1) Peso = about 4s 3d at par.

(2) 1 hectare = 2 acres 1 rood 35.383 poles.

Mortgage Loans in 1915-1916.

Departments	Number of Mortgages		Total Area	Estimated Value	Returns of Properties according to the Bank	Sums for which Proprietors applied	Sums lent by the Bank	Amount of Annual Interest on Mortgages
		Number of Mortgaged Properties	hectares	pesos	pesos	pesos	pesos	pesos
Montevideo . .	6	8	298	133,331	4,335	62,500	34,000	2,725
Ortigas	6	6	12,246	339,496	16,841	183,500	169,000	13,549
Camelones . .	11	12	2,430	308,123	13,328	164,000	148,800	11,930
Cerro Largo . .	3	3	786	35,004	1,262	20,000	15,000	1,182
Colonia	12	14	2,489	231,834	8,690	92,500	74,900	6,006
Durazno	7	11	15,249	729,268	23,693	256,000	247,500	19,843
Flores	4	4	1,692	130,534	4,960	63,000	49,000	3,928
Florida	5	5	1,413	91,650	2,968	23,800	15,800	1,266
Maldonado . .	2	9	1,171	45,291	2,251	25,000	19,500	1,563
Minas	15	26	8,082	432,364	18,021	256,300	189,200	15,196
Paysandú . . .	34	59	51,715	2,402,418	97,634	1,253,500	1,060,600	85,035
Rio Negro . . .	8	11	17,674	1,075,758	47,233	615,500	529,000	42,413
Rivera	3	3	1,440	46,082	1,824	30,000	22,000	1,763
Rocha	4	9	1,902	68,401	2,503	45,000	30,500	2,445
Salto	3	7	17,008	612,817	26,250	377,000	331,000	26,538
San José	11	14	3,135	302,868	13,037	125,000	118,000	9,460
Soriano	4	4	7,143	434,440	16,144	244,000	183,000	14,672
Tacuarembó . .	13	22	15,689	589,348	23,206	352,200	275,400	22,105
Treinta y Tres	6	9	3,279	112,390	4,650	102,500	50,200	4,024
Total	157	236	164,750	8,121,427	328,839	4,291,300	3,562,400	285,653

This table shows that while the bank was not niggardly in the matter of granting loans it made them only on the largest and on the safest security possible.

It should be noted that during 1914-1915 the total sum of the loans granted surpassed 100,000 pesos only in seven departments, whereas in the year which ended in 1916 it did so in ten departments. In the two years the total sum of the loans reached its maximum in the departments of Paysandú and Rio Negro.

If the distribution of loans according to their importance be examined the following facts are obtained :

Distribution of Loans according to their Importance.

Category				Number of Mort- gages	Number of Mort- gaged Prop- erties	Amount of Loans granted — Pesos	Percentage of Total Amount of Loans granted
—				—	—	—	—
From	100 to	1,000 pesos.	.	3	3	2,700	0.08
»	1,001 »	2,000	» . .	17	17	27,200	0.76
»	2,001 »	5,000	» . .	29	31	124,800	3.50
»	5,001 »	10,000	» . .	45	68	351,800	9.88
»	10,001 »	20,000	» . .	24	45	358,700	10.07
»	20,001 »	30,000	» . .	13	21	330,700	9.28
»	30,001 »	50,000	» . .	9	11	400,500	11.24
»	50,001 »	70,000	» . .	2	2	121,000	3.40
»	70,001 »	100,000	» . .	8	13	677,000	19.00
»	100,001 »	140,000	» . .	3	5	366,000	10.27
»	140,001 »	200,000	» . .	3	16	575,000	16.15
»	200,001 »	400,000	» . .	1	4	227,000	6.37
Total. . .				157	236	3,562,400	

We see that the maximum sum of the loans were in the category of those between 70,001 and 100,000 pesos, the average here being 84,625 pesos on a mortgage. However it may be said that the generality of loans, if their amounts be regarded, were in the category of those from 10,000 to 100,000 pesos, which comprises 52.99 per cent. of the total sum lent.

As regards the redemption of mortgages the year 1915-1916 gives the following figures :

Redemption of Rural Mortgages in 1915-1916.

Departments	Number of Mortgages	Number of Properties	Amount of Loans Repaid — Pesos	Percentage of Total Sum Repaid
Montevideo . .	3	4	23,100	2.24
Ortegás	1	1	6,900	0.67
Camelones . . .	9	10	64,900	6.29
Cerro Largo . .	4	18	17,400	1.69
Colonia	4	3	14,200	1.38
Durazno	17	105	187,100	18.13
Flores	6	5	96,600	9.36
Florida	12	30	287,700	27.88
Maldonado . . .	2	2	2,300	0.23
Minas	2	3	9,700	0.94
Paysandú	3	3	89,500	8.67
Rio Negro . . .	2	2	23,900	2.32
Rivero	—	—	—	—
Rocha	—	—	—	—
Salto	2	5	23,000	2.23
San José	3	6	16,000	1.55
Soriano	9	6	125,800	12.19
Tacuarembó . .	3	4	39,400	3.89
Treinta y Tres .	2	2	4,200	0.41
Total . . .	84	209	1,031,700	—

The maximum number of redeemed mortgages is found in the category comprising loans of from 30,000 to 50,000 pesos. The redemptions in this category amount to 30.37 per cent. of the total. It should be said however that many loans between 5,000 and 50,000 pesos were repaid, the repayments in this category amounting to 78.75 per cent. of the total.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

DENMARK.

THE WORKING OF THE DANISH LAND CREDIT ASSOCIATIONS IN 1916.

In our issue for April 1911 we published a detailed study of the organization of rural land credit in Denmark; in that for January 1913 we included a note on the activity of the Danish land credit associations in 1911-12; in that for February 1914 an analogous note on the year 1912-13; in that for January 1916 a note on 1914-15. We have now, the information which enables us to establish similar statistics for the year 1915-16. To make comparisons easy we have as usual distributed our facts in two tables, of which the second gives statistical information as to land credit associations which grant only loans on first mortgages, while the first includes all the mortgage associations founded with the especial object of granting loans at low rates of interest on second mortgages. It should be remembered that all these associations are based on the principle of mutual solidarity.

It will be seen that the amount of the loans granted on first mortgages by the fourteen associations in the second table was in round figures 1865 million crowns (1) at the beginning of 1916, that is more by 367 million crowns than in 1910. Since several of these associations do not distinguish between urban and rural loans we cannot give exact information as to the debt with which rural landed property is burdened, but it is estimated as half the total debt (2).

As regards the activity of the Mortgage Bank of the Kingdom of Denmark we note that on 31 August 1912 it contracted a new debt of 10,800,000 crowns and was thus enabled to buy from the Treasury bonds for State loans to small farmers (*Jordlodder til Landarbejdere*). The bank held on 31 March 1915 bonds of associations for land credit to the value of 33, 144,000 crowns, and *Jordlodder til Landarbejdere* bonds to the value of 16,932,000 crowns.

(1) 1 crown = about 15 s 1 1/4d at par.

(2) See *International Review of Agricultural Economics*, 1914, VI. 67.

TABLE I. — *Position of the Mortgage Association at the end of the year 1915-1916.*

Associations		Total number of mortgages	Original mortgages	Remaining mortgages	Reserve fund	Date at which books were closed	Date of foundation
<i>Urban Associations.</i>			Crowns	Crowns	Crowns		
1	Hypotekforeningen for Kjøbenhavn og Omegn (Mortgage Association of Copenhagen and its Neighbourhood)	2,682	45,848,700	44,908,613	1,961,310	31-3-1916	1895
2	Grundeernes Hypotekforeningen (Mortgage Association of Landowners)	1,138	19,345,900	18,670,150	639,914	31-3-1916	1905
3	Hypotekforeningen for Aalborg (Mortgage Association of Aalborg)	608	4,097,700	3,169,678	182,419	31-3-1916	1895
4	Hypotekforeningen for Aarhus (Mortgage Association of Aarhus)	1,084	8,301,100	6,467,647	307,459	31-3-1916	1895
5	Jydske Hypotekforening (Jutland Mortgage Association)	4,118	20,837,100	18,337,808	812,176	31-3-1916	1899
6	Østlærernes Hypotekforening (Mortgage Association of the Dioceses of the Islands)	4,655	19,384,000	17,075,814	978,498	31-3-1916	1901
Total 1916 . . .		14,285	117,814,500	108,629,710	4,881,776	—	—
" 1915 . . .		13,875	114,951,200	105,146,399	4,625,288	—	—
<i>Rural Associations.</i>							
1	Jydske Land-Hypotekforening (Jutland Rural Mortgage Association)	5,577	11,234,400	10,526,434	771,405	31-3-1916	1906
2	Østlærernes Land-hypotekforening (Mortgage Association of the Dioceses of the Islands)	1,691	7,587,500	6,702,632	446,171	31-3-1916	1906
3	Husmands-Hypotekforeningen (Mortgage Association of Small Rural Landowners)	5,257	4,655,900	4,326,893	156,430	31-3-1916	1907
Total 1916 . . .		12,525	23,477,800	21,555,959	1,374,006	—	—
" 1915 . . .		12,921	23,996,300	22,264,610	1,295,042	—	—

TABLE II. — *Position of the Associations of Land Credit at the end of the year 1915-1916.*

	Associations	Total number of mortgages	Original mortgages	Remaining mortgages	Reserve fund	Date at which books were closed	Date of foundation
			Crowns	Crowns	Crowns		
1	Den danske Landmandsbanks Hypotekafdeling (Mortgage Division of the Landmandsbanken)	1,371	—	19,845,318	—	31-12-1915	1872
2	Kreditkassen for Huskere i Kjøbenhavn (Credit Bank for Owners of Houses in Copenhagen)	1,802	107,487,387	105,944,704	7,027,501	10-3-1916	1797
3	Østfatternes Kreditforening (Association of Landowners of the Dioceses of the Danish Islands)	42,829	571,101,600	514,885,897	17,760,360	31-3-1916	1851
4	Kreditkassen for Landejendomme i Østifternes (Credit Bank of the Rural Properties in the Danish Dioceses)	12,796	153,699,100	142,769,668	4,299,378	31-3-1916	1866
5	Kreditforeningen af Grundejere i Fyns Stift (Association of Credit of the Landed Proprietors in the Diocese of Fyen)	7,075	52,798,100	48,776,850	1,403,825	31-3-1916	1880
6	Kreditforeningen af Ejere af mindre Ejendomme paa Landet i Østifternes (Association of Credit of the Small Rural Landowners of the Dioceses of the Islands)	29,185	44,200,000	38,630,662	2,321,069	31-3-1916	1880

	tion of Credit for Industrial Properties)	549	9,914,000	9,148,808	1,143,374	31 -3-1916	1897
9	Kreditforeningen af jydske Landejendomsbesiddere (Association of Credit for Rural Properties in Jutland)	35,144	433,851,100	408,198,968	19,693,082	31 -3-1916	1851
10	Den vest- og sønderjydske Kreditforening af Land- ejendomsbesiddere (Association of Credit for Rural Properties in West and South)	19,233	170,027,800	157,889,792	9,031,022	31-12-1915	1860
11	Kreditforeningen af Købstadgrundejere i Nørrejylland (Association of Credit of Landowners in Towns of North Jutland)	13	55,800	10,091	202	28 -2-1916	1852
12	Ny jydske Købstadskreditforening (New Credit Associa- tion of Commercial Towns of Jutland)	11,181	125,500,100	116,351,860	7,035,144	31 -3- 1916	1868
13	Kreditforeningen af Ejere af mindre Ejendomme paa Landet i Jylland (Association of Credit of Small Rural Proprietors of Jutland)	59,067	136,744,000	121,453,966	5,898,397	31 -3- 1916	1880
14	Kreditforeningen af Grundejere paa Landet i Jylland (Association of Credit of Country Landowners of Jutland)	5,255	37,231,900	33,793,876	1,614,027	31 -3-1916	1893
	Total 1916 . . .	228,170	—	1,865,139,650	84,738,305	—	—
	• 1915 . . .	256,472	—	1,889,683,707	80,028,631	—	—

GERMANY.

THE BANK OF THE LANDSCHAFT OF EASTERN PRUSSIA AT KOENIGSBERG IN
1915-1916. — *Der Deutsche Oekonomist*, Berlin, 29 July 1916.

When once the pre-war conditions of administrative life had been re-established in Eastern Prussia economic life could resume a more normal course within this bank's sphere, thanks to State support and to the anticipated payment of indemnities for losses by the war. The bad harvest of 1915 certainly made recuperation slow, and agriculture had still in many respects to suffer from the measures rendered necessary by the war.

The war gave a particular character to economic life. The flocks and herds could not be maintained at their former level: in many cases it was impossible to procure manures and concentrated forage in sufficient quantities, and on the other hand the sale of live stock and agricultural products reached important dimensions. Many products which were used for production in time of peace were converted into money which flowed into the banks and savings banks. The quite extraordinary increase in the deposits of the Bank of the Landschaft of Eastern Prussia is thus explained. For the same reason a reduction was noticeable in several cases in the investments on current account and other investments, which were transferred to credit accounts; although after recurrent oscillations the total decrease was more important at the end of the year, particularly as a consequence of subscription to the war loan. The funds entrusted to the bank and the important sums paid into it by savings banks necessarily remained available owing to their particular character, and were consequently used to buy Prussian and German interest-bearing treasury bonds. At times the bank held more than 47 million marks (1) in these bonds. The issue of bills naturally decreased owing to the interest taken in the war loans. The banks could therefore grant considerable quantities of bills at moderate rates, gradually put a term to those financial operations of the Landschaft which were pending at the beginning of the war, and take back the bills issued by the Landschaft.

(1) 1 mark = 11 3/4 d. at par.

Financial Statement for the year (1April 1915-31 March 1916).

The following are some items from the profit and loss account :

RECEIPTS.

a) Profits on Title-Deeds.

1. on title-deeds themselves.	8,216.42	marks	
2. on interest on title-deeds.	526,696.57	"	
3. on commissions on operations with title deeds	66,469.96	"	
			<hr/>
			601,382.95 marks

b) On Commission — Commission Account.

1. on advances.	17,352.20	marks	
2. on deposits.	102,613.50	"	
3. on mortgage operations.	1,199.15	"	
4. on sureties.	1,765.90	"	
5. on current accounts.	89,469.62	"	
6. on various receiving and banking operations.	14,201.91	"	
			<hr/>
			226,602.28 "
			320,327.14 "

c) On Interest. — Interest Account.

d) On Discounting — Interest on Securities Account.

1. Interest on securities.	301,852.20	marks	
2. Interest on treasury bonds.	823,041.64	"	1,124,893.84 "
<i>e) Excess Profit on Management of Real Estate</i>			47,422.83 "
<i>f) On Credit held and redeemed</i>			57,700.80 "
			<hr/>
Total Receipts.			2,378,129.84 "

EXPENDITURE.*a) Costs of Administration (including branches).*

1. Salaries.	243,208.95	marks
2. Indemnities and costs of transcription.	194,010.03	"
3. Carriage, stamps, telegrams, telephone.	14,899.88	"
4. Printing and duplicating.	22,661.73	"
5. Heating, light, water.	13,153.74	"
6. Taxes and exchange tax.	62,527.11	"
7. Advertisement, subscriptions to newspapers.	8,671.59	"
8. Office material and binding.	14,152.73	"
9. Share in costs of the general council of the province and the commission of accounts.	76.00	"
10. Costs of meetings of general council and travelling expenses.	2,664.10	"
11. Travelling expenses and indemnities paid to officials of central establishment and branches.	15,796.33	"
12. Rent.	73,615.30	"
13. Costs and share in salaries of Land-schaft.	70,000.00	"
14. Various.	51,572.89	"

787,010.36 marks

b) Amortization.

on moveables.	42,482.40	"
» real estate.	126,000.00	"
» current account.	121,001.00	"
» advances "	47,110.00	"
» sureties.	10,245.00	"
» various.	242,604.47	"

589,442.87 "

c) Payments for life insurance of employees.

9,657.65 "

Total expenditure . . .

1,386,110.88 "

The *excess of receipts over expenditure* (profits) amounted thus to 992,018.96 marks, as against 558,313.30 marks in 1914-1915 and 742,926.32 marks in 1913-1914. Deducting the shares due to the dismortgaging funds (21,466.30 marks) and 159,160 marks due to the manager and the employees, we find that the net profits amounted to 811,392.10 marks.

This sum is distributed as follows:

1. To the bank's savings reserve fund 28,879.11 marks
2. Three quarters to the special fund of the Landschaft of East Prussia (entered on debit side of balance-sheet) 586,884.74 "
3. One quarter to the bank's general reserve fund 195,628.25 "

The Savings Bank. — The Landschaft is responsible for investments in the savings bank, which has the recognized power of receiving trust funds. It had the activity expected of it. In spite of much variation in the sums entrusted to it, owing to the investment of savings in the war loans and the subscription of 4.5 million marks to the third and fourth of these loans, the total amount of savings was increased by about one and a half million marks during the year and was at its close more than nine and a half million marks. The profits of the savings bank were much reduced by the amortization of its title-deeds. The amount of its investments was:

on 1 April 1915 (11,723 savings bank books) 8,027,701.77 marks
 on 31 March 1916 (13,509 " " ") 9,605,115.14 "
 (including credited interest amounting to 319,391.73 marks)

The savings reserve fund is invested at the Landschaft in Prussian Loan consolidated stock and in the public debt, etc.: Its amount was:

on 1 April 1915 186,097.00 marks
 on 31 March 1916 (including total profit for 1915-1916 of 28,879.11 marks) 222,779.10 "

The bank's *general reserve fund* passed during the year under review from 961,844.33 marks — including interest and the quarter of the net profits — to 1,199,426.56 marks.

The bank's *total profit* is noticeably more than in the preceding year, the increase corresponding to that in the circulation of funds and the sums on the balance-sheet. In addition to the profits realized as commissions on subscriptions to the war loans, which more than compensated for the depreciation of title deeds by the lowering of the currency, and independently of the increased profits on other commissions, the increased sum coming under the head of interest decided the results of the year. Costs of administration certainly increased noticeably, owing to the increase in taxes, in contributions to enterprises of public utility, etc. Before the bank's net profit was determined sums destined for the amortization of its buildings

and their contents were deducted. 50,000 marks was paid into the employee's pension fund, which amounted on 1 April 1915 to 100,440.67 marks and which, thanks to interest, was 104,180.67 marks at the end of March 1916. If the sum paid into it as above be included, its amount was 154,180.67 marks.

As appears from the mortgage account, real estate was mortgaged for 351,000 marks. The office for mortgage loans dealt with operations fewer by 420 than in the previous year. The bank sent to the loan funds all the correspondence and authorities received from those interested in the land register and from the creditors, so as to focus all the register's operations ; and it encouraged recourse to credit by creating second mortgages, together with loans on bills, and by granting extraordinary credits.

Part IV: Agricultural Economy in General

AUSTRALIA.

LAND SETTLEMENT AND THE PROVISION OF CREDIT IN WESTERN AUSTRALIA (*concluded*) (1)

by

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§ 3. THE PROVISION OF CREDIT.

Land, labour and capital are the elements of production. With his own hands the settler in Western Australia usually provides his own labour, and the government supplies the land on easy terms; it also goes a very long way indeed to finance the farmer by means of loans.

The Bank Acts. — By the Agricultural Bank Act, 1894, a bank was established for the purpose of promoting the occupation, cultivation and improvement of farm lands within the State. This Act with a number of subsequent amendments was repealed by a consolidating Act in 1906 which placed the bank on a new footing. Under the new Act the bank was placed under three trustees appointed by the governor in whom is vested the whole of the bank property. The necessary funds are chiefly provided by the issue of mortgage bonds to the Government Savings Bank at a rate not exceeding 4 per cent. At later dates they have been partially

(1) See the first part of this article in our issue for December 1916.

derived from the General Loan Fund at a slightly higher rate of interest. Since its re-constitution under the new Act, the operations of the bank have rapidly increased. The amount authorised to be raised under the 1906 Act was £1,000,000 but by amending Acts of 1907, 1909, 1910, 1912, 1913 and 1914 its capital has been successively raised to its present level of £4,500,000.

Objects for which loans are granted. — Under the consolidating Act of 1906 advances were made to settlers, if the trustees thought fit, for specific objects such as ring-barking, clearing, fencing, draining, water conservation, discharging existing mortgages, also the purchase of stock for breeding purposes. Purchase of machinery was added later. Advances to any individual could not exceed £500. Under an amending Act, 1912, the provisions were extended in various directions and now read as follows: — «Subject to the provisions of this Act the bank may make advances to persons engaged in the business of farming or grazing, or in agricultural, horticultural or pastoral pursuits, to an amount not exceeding £2000, or in any industry that the governor may by proclamation declare to be a rural industry, for any purpose incidental to or in aid of any such business, pursuit or industry, including the erection of a dwelling house for the borrower on any land occupied or used by him in connection with such business, pursuit or industry». As a matter of fact, however, the main objects for which loans are granted are those named in the original Act. The maximum limit of loans has been greatly increased.

Agricultural bank methods. — Applications for loans must be made on a prescribed form and contain full particulars of the objects, such as clearing, fencing, stock, machinery, etc., for which the advance is required.

Each application must be accompanied by a fee of 1 per cent. of the sum applied for. Loans are granted for sums of £25 or any multiple thereof, but at no time shall the advances to any one person exceed £2000. The security taken by the bank is a first mortgage over the property. A bill of sale by way of collateral security is required over all stock and machinery purchased with the bank's funds. Mortgages are prepared free of charge to the borrower, but the latter are required to pay the statutory fees for registration of their securities, amounting to a few shillings. The whole amount of an approved loan need not be paid at once, but progress payments are made against improvements on the certificates of approved neighbouring landholders. This last provision has sometimes been abused. The minimum instalment of a loan payable at one time is £10.

Relation of bank to the settler. — The contact of bank and borrower begins with the occupation of the land, but crown lands being valued and classified prior to selection, the bank is enabled to give an opinion quickly before the settler selects the land. While the trustees are empowered to fix advances on land, it is not obligatory on them to do so in every case. They may use their own discretion when the security is considered unsafe either on account of the inferior quality of the land, inadequate area for maintenance of a home, situational disadvantages, or, in the case of special advances, low sale value or insufficient development. Needless to say,

selectors almost invariably choose a block which will carry an advance from the bank. Loans, once made, are only liable to recall for breaches of the mortgage covenant.

Rates of interest, surrender of securities etc. — Loans made for improvement purposes carry interest at the rate of 5 per cent. per annum. The rate chargeable on advances made for other purposes, such as stock, machinery etc., is 6 per cent. per annum. Interest is calculated on the daily balance and is payable on the first day of January and the 1st. of July in each year. A closing fee of 10s. 6d. is payable on the discharge of every mortgage, and a production charge of 5s. is made in connection with the lodgement of documents of title for the registration of outside dealings.

Currency of loans. — All loans made against improvements have a currency of thirty years, and are amortisable by fifty equal half-yearly instalments, the interest only being payable for the first five years. Stock and machinery loans are repayable by ten equal half-yearly instalments commencing three years from date of making the advance. It is, however, the privilege of the borrower to repay the whole or any portion of the loan at any time without notice.

A typical transaction. — The following entries in connection with an advance to a settler in the Coorow district will serve to illustrate the nature of the improvements effected and the system of progress payments. Every inducement is offered to the new settler by prompt progress payments, so that on taking up land he may immediately find employment as his own master.

TRANSACTIONS IN CONNECTION WITH LOAN OF £500.
COOROW DISTRICT.

1st. Loan, £125 approved.

<u>Date</u>	<u>Payments</u>	<u>Improvements</u>
29-7-08	£30	Well, 35 ft.
26-8-08	25	Fence, 80 chains, 6 wires at 6s, 6d.
8-10-08	20	Fence, 53 chains, 6 wires at 6s. 6d.
—	—	Ring and scrub 70 acres at 3s, 6d.
3-10-10	15	Clearing 10 acres.
—	—	Ring and scrub 30 acres.
17-5-11	35	Clearing 35 acres.
	<hr/>	
	£125	

2nd. Loan approved.

26-9-10	44	Fencing 147 chains, 6 wires at 6s.
9-1-11	146	Clearing 10 acres at 20s.
21-2-11	60	Clearing 140 acres at 20s.
—	—	Fencing 150 chains, 6 wires at 6s.
4-4-11	25	Fencing 103 chains, 6 wires at 6s.
—	—	Well, 28 ft. timbered.
	<hr/>	
	£275	

3rd. Loan approved.

2-3-11	100	Mares
------------------	-----	-------

Total . . . £500

Stock and machinery loans are granted in the wheat areas only when 250 acres, worth 20s. per acre, have been cleared and rendered fit for the plough. Loans for the purchase of stock and machinery are limited to £100.

Extent of the bank's operations. — The following statement, compiled from the annual report of the trustees, shows the total amounts advanced to farmers up to 30 June of each of five years, the amounts repaid and the outstanding balances at the same dates.

TABLE VII. — *Operations of agricultural bank 1910-14.*

	1910	1911	1912	1913	1914
	£	£	£	£	£
Advances to date	1,257,082	1,540,241	1,946,184	2,582,937	3,089,575
Repayments to date	321,122	563,430	665,452	698,980	757,624
Outstanding Balances	935,960	976,811	1,280,732	1,883,957	2,331,951

With the wider objects for which the bank now grants loans, the greater maximum advance made possible by the amended (1912) Act, and above all owing to the greater number of settlers, the operations of the bank have steadily increased during recent years.

Purpose of the bank loans. — Advances may be made for effecting certain improvements already referred to, and also to a more limited extent for the purchase of stock or implements. Advances may also be made to lift existing mortgages to private institutions to an amount not exceeding three fourths of the value of the improvements already made on the holding, but purchase money is not regarded as a liability under the Act. The following table shows the various purposes to which bank advances were applied during the year ending June 1913. The last column of the table shows the total amount which had been expended on the several objects up to date.

TABLE VIII. — *Purposes to which bank advances were applied.*

	For year ending 30 June	Total amount to date
Liabilities taken over.	£124,056	£231,353
For purchase of stock	67,941	246,495
For purchase of plant	—	6,494
For purchase of implements	9,732	14,578
For purchase of fertilisers.	—	3,278
For developmental purposes	435,024	2,080,739
	£636,753	£2,582,937

The amount spent on the development or improvement of farms covered a variety of items. As usual the estimated value of the improve-

ments was considerably greater than the bank advances given to effect them. Table IX taken from the report shows the value of these improvements during the same year. The last column also shows the value of the several improvements effected by the help of the bank up to date.

TABLE IX. — *Improvements effected with the assistance of bank funds.*

	For year ending 30 June		Total amount to date	
	acres	costing £	acres	costing £
Clearing	285,350	289,066	1,174,521	1,471,636
Cultivating	360	110	214,398	120,572
Ring-barking & scrubbing	338,816	97,429	1,706,435	246,472
Fencing	chains 227,815	68,145	chains 1,452,918	429,782
Draining		286		5,945
Water supply		35,096		138,615
Buildings		3,207		87,075
Orchard			acres 321	4,321
Blackboy & poison grubbing	acres 10,529	1,606		13,786
		£494,945		£2,518,204

Proportion of loans granted. — During the year ending 30 June the board of trustees held fifty meetings and dealt with 4,009 applications from new and old clients, aggregating £923,885. The loans authorised numbered 3,442 involving a sum of £660,765. Of these, sixty-three applications representing the sum of £11,159, were subsequently cancelled at the applicants' request, and undrawn loans to the value of £155,734 were also cancelled, leaving a net capital appropriation of £493,872 for the year. Applications amounting to £184,255 were declined in full.

Number of clients. — The accounts closed during the financial year 1913 aggregated 133 as against 461 for the preceding term. New accounts to the number of 1358 were opened, making the total number of accounts, current as on 30 June, 8326, and the average amount of borrowers' balances £226 5s. 6d.

Loans to farmers in other States. — In each of the Australian States the local government has established a system under which financial aid

is rendered to the farmers. In every instance the scale of operations has steadily increased in magnitude during recent years, and in 1914 involved a large outstanding balance. The position of Western Australia relatively to the other States will be gathered from the following tables which are compiled from figures furnished by the Government Savings Bank of Victoria.

TABLE X. — *Government advances to farmers (1909-10 to 1913-14).*

State	Aggregate advanced to 30 June				
	1910	1911	1912	1913	1914
N. S. Wales (1)	1,362,853	1,617,192	1,948,885	2,423,955	3,531,263
Victoria.	2,657,713	2,797,323	2,954,618	3,208,903	3,491,008
Queensland	235,793	306,944	430,403	623,498	851,600
S. Australia (2)	1,544,946	1,786,762	2,064,583	2,370,076	2,601,450
W. Australia	1,257,082	1,540,241	1,946,184	2,582,937	3,089,575
Tasmania	9,187	14,610	18,636	23,915	41,004
Commonwealth . . .	7,067,574	8,063,072	9,363,309	11,233,284	13,605,900

(1) *For years ending December prior, except for year 1914.*

(2) *Includes loans to other producers and to local bodies on the security of their own rates.*

All of the States have made heavy advances to their farmers. Deducting the amounts of loan moneys repaid in the several States at different dates from the amounts advanced, the outstanding balances have been estimated. The facts are stated in Table XI.

TABLE XI. — *Government loans to farmers (1909-10 to 1913-14).*

State	Balance outstanding at 30 June				
	1910	1911	1912	1913	1914
N. S. Wales (1)	(2) 795,113	928,086	1,074,358	1,396,336	2,297,981
Victoria	(2) 1,308,425	1,306,657	1,343,834	1,511,798	1,676,432
Queensland	163,640	206,997	305,652	470,795	636,790
S. Australia (3)	710,316	819,818	966,670	1,150,020	1,264,417
W. Australia	935,960	976,811	1,280,732	1,883,957	2,331,959
Tasmania	8,521	13,561	16,592	21,089	36,965
Commonwealth	3,921,975	4,251,930	4,987,838	6,433,995	8,244,544

(1) *At 31 Dec. prior, except in 1914.*(2) *After deduction of special principal payments in advances.*(3) *Includes balances to farmers, and other producers and to local bodies on the security of the rates.*

At the latest date for which returns common to the States are available, Western Australia had greater outstanding balances with its farmers than any other State.

Loan operations relatively to number of farms. — When the loan operations of the bank are contrasted with those of the other States, the figures become still more striking when account is taken of the actual number of farmers in the various States. In Table XII are stated the total number of holdings of all sizes alienated or in process of alienation in the several States in 1914, the outstanding loan balances in the same year, and finally the amount which each farm would carry if the balance in each State were equally distributed among the holdings. The data for Queensland are not available.

TABLE XII. — *Government loans and number of holdings (1914).*

State	Number of holdings	Balances outstanding	Calculated loan advance per holding
		£	£
N. S. Wales	92,665	2,297,981	24.8
Victoria (1)	66,811	1,511,798	22.6
S. Australia	21,369	1,264,417	59.2
W. Australia	15,620	2,331,959	149.3
Tasmania	13,371	36,965	2.8

(1) 1913.

Such a comparison gives a general view of the situation, but lays no claim to completeness. It embraces all holdings irrespective of size, and some States have a greater preponderance of small holdings than others. Examination of the details show that Western Australia has relatively somewhat fewer of the smaller sizes than the older States. Its differences in this respect, are, however, trivial when compared with the proportionate advance per holding, and it is clear, therefore, that in proportion to their numbers, the government there has gone much further in providing credit for its farmers than have those of the sister States.

Newness of farms in Western Australia. — The results found in the preceding paragraph pay, at first sight, a poor compliment to the farming conditions prevalent within the State. It should be recollected, however, that agriculture in Western Australia is very largely a new development, and that its operations (Table I.) and its number of holdings (Table VI) have increased with great rapidity during recent years. The newness of its agriculture is also indicated by the rapid increase in the area of its lands already alienated or in the process of alienation (Table V). This increase is not only relatively, but also absolutely, greater than the corresponding increase in any other State. This can be seen from the following statement where the total area of land alienated and in process of alienation is stated for each State at 1901 and again at 1913 - the last year for which complete data are available.

TABLE XIII. — *Lands alienated and in process of alienation in the different States at different dates.*

State	Lands alienated & in process of alienation		
	1901	1913	Increase in 12 yrs
	acres	acres	acres
N. S. Wales	48,039,242	57,818,023 (1)	9,778,781 (2)
Victoria	23,797,226	31,171,956	7,374,730
Queensland	16,325,132	26,081,018	9,755,886
S. Australia	8,088,897	12,451,709	4,362,712
W. Australia	9,585,144	21,362,546 (1)	11,777,402 (2)
Tasmania	4,893,961	6,341,817	1,447,856

(1) To 30 June.

(2) In 11 $\frac{1}{2}$ years.

Government loans are not intended to bolster up incompetent farmers in old settled districts, but to finance new enterprise and open up new fields for the settler. Regarded in this light, the table shows that of late years Western Australia has taken a lead in the establishment of new farms, and consequently has had heavy demands made upon her credit. Reference to Table XI shows that at the date of the latest returns her existing loans to settlers exceeded those of any other State.

§ 4. CONCLUSION.

Land settlement has proceeded in the State with great rapidity partly for technical and economic reasons previously discussed, but very largely also as a result of the vigorous land policy of successive governments, and the liberal character of its agricultural loans. Whether in certain instances its land policy has been too vigorous and its loan system too generous, are matters with which this article is not intended to deal. Its object is to record facts. Present indications suggest that the loan policy will be modified at an early date owing to the growing stringency of the money market resulting from the war.

Effect of curtailing loans. — Should the loan policy of the government be curtailed for the reason stated, it is possible that a number of new settlers, possessing no resources other than their credit with the bank,

may repudiate their obligations and abandon their holdings. This is the prime danger of a generous loan policy which, if carried too far, may defeat its own end. The bank holding the mortgage can, of course, sell any properties reverting to it with the improvements thereon. As the advances were made against the improvements, it need not necessarily incur loss. It may do so, however, and it will lose the settler. During 1914, eighty securities reverted to the bank in this way, fourteen unsold properties were carried over from the previous year, and sixty were resold, within the year. If the bank's operations must necessarily be curtailed, the number of those resales is almost certain to increase in the future.

Prospects for the future. — Under the conditions indicated, a premium will be placed upon the possession of private capital by new settlers seeking for land in Western Australia. At the present time good wheat lands are very appreciably cheaper there than similar lands in the eastern States. Should a period of temporary depression now supervene, in the event and as the result of curtailments by the bank, the difference will become relatively greater. Depreciation of land values in the west can be only temporary. At the time of writing the wheat yield of the State for 1915 is officially estimated at 13.5 bushels per acre over a record area. A factor likely to affect prices in the future and promote settlement is the opening of land connection with the eastern States over the trans-continental railway promised for the close of the present year.

RUSSIA.

THE RESULTS OF INTERIOR COLONIZATION IN FINLAND.

(Concluded) (1).

§ 5. THE COMPONENT PARTS OF THE PROPERTY OF COLONISTS.

Having distinguished between the two factors in colonization in Finland, the man and the land, and studied them in every aspect, we will now turn our attention to the results of their joint action, and the question of whether or to what extent they advance the work of colonization. We will do it best by inspecting more closely the individual forms of capital which go to make the complex assets and liabilities of farming and also the capital invested in households, secondary businesses and the like. From the increase and decrease of such capital and groups of capital, from the changes suffered by all assets from the time the colonists' lots were taken over until the close of the enquiry, we will attempt to construct a picture of the results attained by the new Finnish colonists and of their limitations. We will examine the component parts of the property in the order in which these were placed at the end of § 2.

1. *Capital in real estate of the farms.*

The capital in real estate is composed of capital in land, capital in soil and capital in buildings.

a) *Capital in land.* When the lots were taken over the average gross price a hectare (2) for the total 219,628 hectares comprised by all the land of the colonies, and for the appurtenant buildings, woods and hunting and fishing rights, varied according to the grant from 77 to 136 Finnish marks (3). The average price a hectare in the seven colonies investigated was, as we have already seen (4), 86 Finnish marks, that is 22 per cent less than the general price. The price of land was of course distinctly higher in the case of torp holdings which had already been long settled before the beginning of the

(1) The first part of this article appeared our issue for November 1916.

(2) A hectare = 2 acres 1 rd. 35.383 pos.

(3) 1.2611 Finnish marks = 1s at par.

(4) *International Review of Agricultural Economics*, November 1916, page 119.

colonizing enterprise, than in that of the newly allocated lots: it was in the case of the former, according to facts furnished by the Finnish lease offices (Helsingfors 1915), 642 marks for a hectare of arable land near the demesne land of the estate, and varied according to its situation from 423 to 783 Finnish marks. For abandoned torp lands the price varied from 328 to 528 Finnish marks. For meadowland near the demesne land of the estate an average price of 333 Finnish marks a hectare was paid and for meadows somewhat remote that of 239 Finnish marks a hectare. The average price for a hectare of woodland was, according to its situation in relation to the demesne land of the estate and according to the grant, from 163 to 125 Finnish marks. A comparison of these prices with those obtaining in Russia proper when the new agrarian reforms were carried out, or those accompanying the colonization of new lands in other countries, shows that hitherto colonizing enterprise in Finland has succeeded in securing land at relatively low prices, and shows too the circumstance, connected with this one, that the prices of land in Finland are as yet generally lower than in other countries.

During the time of the enquiry the following alterations took place in capital in land. By the inclusion of woodland the possible taxable value of arable and meadowland in the investigated colonists' lots rose by 37 Finnish marks a lot.

As a result of permanent improvements — such as breaking new land and clearing it of stones, the construction of larger drainage ditches, the laying out of gardens, the addition of loam to moorland soil — the capital in land increased in value by 176 Finnish marks a lot.

Altogether the value of the capital in land rose during the time of the enquiry by 18,113 Finnish marks, an average of 213 Finnish marks a lot, or of 8.95 Finnish marks per hectare of arable and meadowland. The average yearly increase in the value of the land of the colonies was 44 Finnish marks for each lot, 7 Finnish marks of this sum having arisen by an extension of area at the expense of woodland and 37 by permanent improvements of the soil.

b) *Capital in soil.* According to the author's investigations the most important part of capital in soil consists of the value of manure. When the land was taken over the total value of the manure was 76.2 per cent. of that of the capital in soil; at the end of the enquiry it was 58.3 per cent. The relative value of the manure was lower when the enquiry closed than when farming began because the earlier computation was made in spring, the later on 1 July.

The total capital value and the percentage of it represented by manure varies not only in the different colonies but even more in the different lots within one colony. This is because some lots were made on settled land, previously cultivated and therefore more or less manured; while others were made on virgin soil. The succession of crops has contributed to the same end.

The total value of the stock in cultivated soil when the lots were taken over averaged 411 Finnish marks a lot, and 1,161 Finnish marks on 1 July. The total increase in capital value during the period of enquiry amounted

to 69,779 Finnish marks, namely an average of 750 Finnish marks a lot, or 155.38 Finnish marks for a hectare of arable land and 67.36 Finnish marks for a hectare of arable and meadowland. A relative diminution of capital in soil is to be noted in Koskipää colony, where owing to the remoteness of the arable land, as compared with the other colonies, and the prevalence of the three field system, the live stock could not be increased as much as elsewhere. The increase in value of capital in soil, both annual and total, can be seen from the following table.

Increase in Value of Capital in Soil.

Components of Capital in Soil	Total Increased Value Finnish marks	Annual increased Value					
		By lot		By hectare of arable land		By hectare of arable and meadowland	
		Finnish marks	Percent.	Finnish marks	Percent.	Finnish marks	Percent.
<i>In a number of years.</i>							
Total value of manure	30,952	87	50.6	8.54	42.7	7.55	49.2
Costs of clearing ditches	2,537	6	3.5	0.94	4.7	0.60	3.9
Costs of laying out clover grass fields . . .	2,744	7	4.0	0.92	4.7	0.60	3.9
Costs of transporting loam	1,187	3	1.7	0.34	1.7	0.25	1.6
<i>In one year.</i>							
Costs of labour	13,431	35	20.5	4.57	22.8	3.23	21.1
Seeds	11,275	30	17.4	4.15	20.8	2.77	18.1
Manures	1,635	4	2.3	0.52	2.6	0.34	2.2
Total	63,779	172	100.0	19.98	100.0	15.34	100.0

The annual increase in value of the capital in soil averaged 172 Finnish marks for a single lot, 19.98 Finnish marks for a hectare of arable land, and 15.34 Finnish marks for a hectare of arable and meadowland taken together.

If the lots be classified according to their size the capital in soil at the end of the period of enquiry is found to average as follows for one hectare of arable land :

In lots having an area of less than 2.5 hectares —	350 Finnish mks. for 1 hectare
" " " " " " from 2.5 to 5 " —	201 " " " 1 "
" " " " " " 5 " 7.5 " —	138 " " " 1 "
" " " " " " 7.5 " 10 " —	135 " " " 1 "
" " " " " " 10 " 15 " —	161 " " " 1 "
" " " " " " 15 and more " —	173 " " " 1 "

Thence it appears that the value of the capital in soil in the smaller holdings, those of less than 5 hectares, is relatively greater than it is in the larger farms; a circumstance due, according to the author, to the fact that on the smaller holdings live stock is relatively more numerous than on the large farms.

c) *Capital in buildings.* When the 85 lots which were investigated were taken over the value of the capital in buildings was as follows:

Buildings appurtenant to the lots.	17,660	Finnish marks
Buildings taken over with the land	39,801	" "
Taxable value of sites of premises and of roads . .	630	" "
	<hr/>	
Total . . .	58,091	" "

On 1 July 1912 the value of such capital had risen as follows:

Buildings	187,867	Finnish marks
Taxable value of sites of premises and of roads	1,299	" "
	<hr/>	
Total . . .	189,166	" "

Thus the total increase in value was 131,075 Finnish marks. If the average for a single lot be calculated it is found to be as follows:

When the lots were taken over. —

Buildings appurtenant to them	208	Finnish marks
Buildings taken over with the land	468	" "
Taxable value of sites of premises and of roads. .	7	" "
	<hr/>	
Total . . .	683	" "

On 1 July 1912.

Buildings.	2,210	Finnish marks
Taxable value of sites of premises and roads . .	15	" "
	<hr/>	
Total . . .	2,225	" "

The average increase in value on a lot is therefore 1,542 Finnish marks.

These figures are to be regarded as representing the addition made to the value of the capital in buildings solely by the colonists' activity in farm-

ing their holdings during the period of the enquiry. The market value of the buildings — the effect of a general rise in prices — has been disregarded in accordance with the aim of the whole enquiry as already stated.

As regards single colonies the increase in value of capital in buildings was greatest in Seppälä, where it averaged 2,758 Finnish marks a lot ; and least in Nipuli, the average there being 427 Finnish marks a lot. The number of dwelling houses on the 85 lots investigated was 98 and they comprised 224 rooms. Thus there was an average of 2.5 weather-tight rooms for each lot and 2.3 for each dwelling house. An average of 255 cubic metres, measurements being taken outside, was devoted to dwelling house room on each lot, namely 236 cubic metres to living-rooms and kitchens and 19 cubic metres to masonry. On an average 2.2 members of a family inhabited each living-room, 1.7 being over twelve years old.

In all the 85 lots there were 188 stables and byres, that is an average of 2.2 a lot. This average is high because, as already stated, many colonists' lots have arisen out of earlier torp holdings which usually included several buildings.

The buildings for storage comprised, when measured from outside, an average of 62 cubic metres for each lot, storerooms, granaries and cellars being included.

The value of buildings averaged for each member of a family 175 Finnish marks, or 270 for each of such of them as were over twelve years old. The author observes that these figures represent very low values even according to Finnish standards ; and that in the case of capital in buildings, as in that of capital in land, colonizing enterprise in Finland has succeeded in keeping costs very low, especially where it has been possible to buy up older buildings cheaply.

2. Farming Capital.

The farming capital of the colonists can be analysed as capital in machines and implements, in live stock, in other stock, in shares in the co-operative funds and in cash. We will briefly consider these components individually.

a) *Capital in machines and implements.* When the colonists' lots were taken over the machines and implements were worth 15,642 Finnish marks. During the course of the enquiry their value rose to 22,439 Finnish marks and on 1 July 1912 it had reached the sum of 38,081 Finnish marks. Its greatest increase in value up to that date occurred in Seppälä colony, where it was 735 Finnish marks, its least in Nipuli colony where it was 199 Finnish marks. The average annual increase in the different classes of property forming capital in machines and implements, on a single lot and on a hectare of arable and meadowland, can be shown as follows :

	Per single lot	Per hectare of arable and meadowland
	Finnish marks	Finnish marks
Larger machines	8.15	0.74
Agricultural implements	14.25	1.33
Inventory of stables	2.40	0.20
Inventory of cow-byres	0.75	0.03
Inventory of dairy	11.30	1.03
Carts etc.	14.60	1.28
Household implements	1.75	0.14
Other implements	6.10	0.56
Total	59.30	5.31

The total value of the machines and implements increased on an average during the period of enquiry by 264 Finnish marks for each single lot or by 23.43 Finnish marks for a hectare.

If the various values of the capital in machines and implements in the investigated lots be compared with the size of the holdings, it appears that such capital is notably greater in the larger than in the smaller of these; yet when the average for a single hectare of arable and meadowland is calculated there is no great difference in value to be observed. These facts appear from the following table:

Average Cash value of Machines and Implements according to the Size of the Colonists' Lots and for 1 hectare of Arable and Meadowland.

Area of lots Arable and meadowland	No. of lots	Average value in Finnish marks	
		For a single lot	For 1 hectare of arable and meadowland
Up to 2.5 hectares	2	257	115
From 2.5 to 5 "	11	148	35
" 5 " 7.5 "	22	368	55
" 7.5 " 10 "	11	378	42
" 10 " 15 "	22	501	40
" 15 " 25 "	13	757	43
25 and more "	3	800	20
For whole area	85	448	42

b). *Capital in live stock.* The capital in live stock rose in value between the time when the lots were taken over and that at which the enquiry was completed from 53,549 to 100,190 Finnish marks. Thus the increase was one of 47,641 Finnish marks or 87.1 per cent. The average value on each lot, when taken over, of this capital was 630 Finnish marks, and on 1 July 1912 it was 1,179 Finnish marks. For a hectare of arable and meadowland the average value was 63.38 Finnish marks at the earlier and 110.37 Finnish marks at the later date. The live stock was of least value in Siikajarvi, where it averaged 651 Finnish marks a lot, and of greatest value in Koskipää, where it averaged 2,245 Finnish marks a lot. The total increase in the value of the capital in live stock averaged 549 Finnish marks a lot, varying from 145 to 983 Finnish marks in the different colonies.

If the live stock be divided into the two groups of cattle and horses, and their value from the time when the colonies were first established until the close of the period of enquiry be calculated, the average increase in their respective values on a single lot and on a hectare of arable and meadowland is as follows:

	When land was taken over Finnish marks	1 July 1912 Finnish marks	Amount of increase Finnish marks
<i>Cattle.</i>			
For a lot	429	763	334
• 1 hectare arable and meadowland	43.25	71.44	28.19
Percentage of whole capital in live stock	68 %	64.7 %	—
<i>Horses.</i>			
For a lot	201	416	215
• 1 hectare arable and meadowland	20.13	38.93	18.80
Percentage of whole capital in live stock	31.9 %	35.3 %	—

It thus appears clearly that the capital in live stock has greatly increased on the colonists' lots. The value is distributed among the groups of holdings, classified according to size, as follows :

The Capital in Live Stock on Holdings of Different Sizes.

Area of arable and meadowland	No. of lots	Average value per	
		Lot	1 hectare arable and meadowland
Up to 2.5 hectares	2	551	248
From 2.5 to 5 "	11	613	152
" 5 " 7.5 "	22	801	116
" 7.5 " 10 "	12	925	107
" 10 " 15 "	22	1,387	115
" 15 " 25 "	13	1,766	105
" 25 and more	3	3,337	90
For whole area	85	1,179	110

c) The capital in other stock.

Unlike the capital in the groups hitherto examined that in stock other than live stock has remained unaltered on the colonists' farms, and is even found to have undergone a slight diminution if its average for one hectare be reckoned. This is chiefly due to the circumstance that the inventory was taken at the end of the period of enquiry and therefore in the summer, a time when stock is notoriously at its lowest in farms. Further the beds of manure were reckoned as constituting not capital in stock but capital in soil.

In the 85 lots investigated the capital in stock was of the value of 8,882 Finnish marks, averaging 105 Finnish marks for a lot and 10.51 for a hectare of arable and meadowland. The increase relatively to the outgoings varied according to the colonies.

In Nipuli and Kaskipää colonies the capital in stock diminished in value from 103 to 80 Finnish marks a lot, while in Seppälä and Sippola it increased from 92 to 110 Finnish marks. The increase depends chiefly on the presence of woodland products, such as firewood, building materials, etc.

d) Co-operative shares and cash.

The co-operative shares of the colonists on the investigated lots were very trifling: when the land was taken over their value averaged 3 Finnish marks for a lot and, on 1 July 1912, 13 Finnish marks, giving an increase of 10 Finnish marks. In Sippola and Kaskipää such average value was almost three times that of the general average, being 27 and 29 Finnish marks, but in Muddais on the other hand there was no co-operative enterprise whatsoever.

As regards capital in cash it was naturally greater when the lots were taken over than on 1 July 1912, when the enquiry closed. The money which

the colonists brought with them came, during the time of the enquiry, to be represented by the different forms of capital invested in the farm. When the land was taken over the capital in cash amounted to 11,296 Finnish marks, averaging thus 133 Finnish marks for a lot and 13.25 for a hectare of arable and meadowland. In Koskipää the colonists possessed more than the average sum, namely on an average 224 Finnish marks a lot; in Siikajarvi the average amount possessed on a lot was less than the general average, being not more than 30 Finnish marks.

On 1 July 1912 Koskipää colony still held most capital in cash, averaging 177 Finnish marks a lot; while Nipuli, where such average was only 48 Finnish marks, held least. For all the colonies the decrease in capital in cash per lot varied from 37 to 107 Finnish marks and averaged 43. An increase in the average amount of cash held with a lot occurred only in Mudais and Siikajarvi colonies.

3. Capital not directly invested in Farming.

The changes suffered by capital not directly invested in the farms, but connected with the agriculture of the colonists and therefore influencing the course and the results of their farming activities, will be mentioned shortly.

a) The capital in household goods and implements had the following value:

When the land was taken over			
Household goods	3,519	Finnish marks	
implements.	2,139	"	"
			5,658 Finnish marks
On 1 July 1912			
goods	3,592	"	"
implements.	5,695	"	"
			9,287
Total increase in value			3,629

The increase is chiefly due to a multiplication of implements. The yearly increase averages 9 Finnish marks for a lot and 0.79 Finnish marks for an acre of arable and meadowland.

b) The capital invested in other businesses decreased in the course of the enquiry from 34,590 to 9,692 Finnish marks; and such decrease was made largely at the expense of the money invested in banks. When the land was taken over the savings deposits of the colonists averaged 280 Finnish marks for each lot; and on 1 July 1912 the deposits had been almost

entirely withdrawn, and the average amount remaining in the banks was for each lot only 38 Finnish marks. On the other hand the sum paid for life insurance rose during the period of enquiry from 1,020 to 1,790 Finnish marks, that is by 779 Finnish marks, an average of 9 marks for a lot.

When the land was taken over the average amount of capital invested in other businesses was 407 Finnish marks for each lot. In Muddais colony it was highest, namely 1,023 Finnish marks; in Siikajarvi it was lowest — 66 Finnish marks. In 1912 the average for a lot had fallen to 115 Finnish marks.

The author reckons as capital in other businesses that invested in accessory industries and leasehold and other rights.

c) The capital in personal belongings, such as clothes and furniture, was worth 28,484 Finnish marks when the land was taken over, giving an average of 335 marks for a farm or family. On 1 July 1912 it had not notably increased, being 33,269 Finnish marks, which gave an average of 391 marks for a family. The annual increase therefore averaged 11 marks for a lot and seems very trifling. The reason for its slightness is, according to the author, that after the lots had been taken over the colonists were much occupied in setting their farms in order and had little time in which to supply themselves with clothes, furniture and other personal possessions.

d) The service of paying woodland dues, that is woodland rents and amortization payments attached to the earlier debt with which woods were burdened, was during the period of the enquiry of the value of 30,615 Finnish marks, an average of 360 marks for a lot and of 33.72 for an acre of arable and woodland.

Payments of this description are highest in Koskipää colony where they average 1,053 Finnish marks a lot, and lowest in Siikajarvi and Nipuli where they average 214 Finnish marks a lot.

Finally as regards hereditary payments and presents these occurred in only three colonies — Siikajarvi, Nipuli and Koskipää — and amounted to 3,580 Finnish marks.

In the following table all the capital of the colonists represented by their farming, before and after the lands were taken over and on 1 July 1912, is set out.

Component Parts of Capital	Before lands were taken over				After lands were taken over				On 1 July 1912			
	Total	Average per lot	Average per hectare of arable and meadowland	Per-centage	Total	Average per lot	Average per hectare of arable and meadowland	Per-centage	Total	Average per lot	Average per hectare of arable and meadowland	Per-centage
<i>Capital in land:</i>												
Capital in land . . .	—	—	—	—	138,805	1,574	138.35	48.1	131,918	1,787	167.33	27.1
Increased value of capital in soil . . .	—	—	—	—	—	—	—	—	63,779	750	70.14	11.4
Capital in buildings . . .	17,660	208	20.90	16.5	98,091	683	68.74	20.0	186,166	2,225	208.36	33.7
<i>Farming capital:</i>												
Machines and implements . . .	15,642	184	18.31	14.5	15,642	184	18.31	5.6	38,081	448	41.94	6.8
Live stock . . .	53,549	630	63.38	50.0	53,549	630	63.38	19.0	100,190	1,179	110.37	17.9
Other stock . . .	8,882	105	10.31	8.3	8,882	105	10.31	3.2	8,909	105	9.81	1.6
Co-operative shares . . .	299	3	0.35	0.2	299	3	0.35	0.1	1,177	13	1.23	0.2
Cash . . .	11,996	133	13.25	10.5	11,996	133	13.25	4.0	7,638	90	8.41	1.2
Total . . .	107,328	1,263	126.90	100	281,564	3,312	333.09	100	560,792	6,597	617.69	100

§ 6. THE LIABILITIES OF THE COLONISTS.

During the period of enquiry into the colonists' lots not only the property but also the liabilities of the colonists underwent changes, in the manner which will now be described.

1. The State debt on the land.

When the colonists were settled the State granted the lots as bearing their full taxable value. The amount with which the farms (woodland being excepted) on the 85 investigated lots were burdened was 174,236 Finnish marks, giving an average of 2,049 Finnish marks for a lot and 206.19 Finnish marks for a hectare of arable and meadowland. This debt on the land (prior debt) has been lessened by annual payments in redemption, but on the other hand has been increased when woodland has been subjected to agriculture and the area farmed thus extended. Altogether the debt to the State has diminished only by 4,826 Finnish marks, giving for each lot an average decrease of 56 marks. These low figures are explained by the circumstance that the State, in the first years after the lots had been taken over, did not compel the colonists to make payments in redemption.

At the end of the period of enquiry this prior debt was of 169,410 Finnish marks, giving an average of 1,993 marks for a lot and 186.57 for a hectare of arable and woodland.

2. Loans from banks and private persons. Debts of this category have during the period of enquiry altered, in respect of their total amount and the average for a single lot and for a hectare of arable and meadowland, as follows :

	When the land was taken over Finnish marks	On 1 July 1912 Finnish marks	Increase Finnish marks
<i>Total amount.</i>			
Debts to banks	3,010	17,475	14,465
Other debts	5,080	24,456	19,466
Total	8,090	42,091	33,931
<i>Average per lot.</i>			
Debts to banks	35	205	170
Other debts	60	289	229
Total	95	494	399
<i>Average per hectare of arable and meadowland.</i>			
Debts to banks	3.56	19.24	15.68
Other debts	6.01	27.03	21.02
Total	9.57	46.27	36.70

Most colonists have received credit from the co-operative funds and savings banks and only few loans from individuals. On 1 July 1912 Takkula and Nipuli colonies were most indebted to banks, their debts of this description averaging 130, increased from 57 Finnish marks, for a lot. The increase of indebtedness to banks in Nippuli is to be ascribed to the fact that nine colonists became burdened with a debt of 4,000 Finnish marks as a result of fraudulent discounting, and implicated their property in consequence.

Loans from private persons are very considerable in the colonies of Muddais (average yearly increase of 117 Finnish marks a lot), Seppälä (of 78 Finnish marks), Takkula (of 43 Finnish marks) and Nipuli (of 39 Finnish marks).

3. *Current debts.* The author reckons among these debts such as have a more accidental character and do not bear interest. Such is the credit which the country tradespeople afford for goods ordered by the colonists. These debts were relatively very great in Nipuli colony where their annual increase averaged 286 Finnish marks a lot. The average annual increase in current debts among all the lots investigated was 30 Finnish marks per lot or 2.80 Finnish marks per hectare of cultivated land.

3. *Debts incurred to the forests.* Since it was the aim of the whole enquiry to discover the action on agriculture only of such capital as was in-

vested in farming, the forest dues were reckoned among the liabilities the colonists incurred by forestry, as against the uses they made of their woodland possessions.

The total value of the forest dues from the time the land was taken over until the close of the period of enquiry was 52,434 Finnish marks. The yearly average for a lot was 138 Finnish marks, or for a hectare of cultivated land 13.05 Finnish marks. From the total sum of the forest dues 79.7 per cent. must be deducted as the value of the woodland products (fuel) and 20.3 per cent. as that of pasturage.

The firewood used on the farms is for the most part gathered from the fallen wood, and wood having a market value is seldom used as fuel. In Muddais, where there is less woodland than in the other colonies, the colonists take firewood from their wood most sparingly. It has happened that firewood has been sold by the colonists outside a colony, being transported by water. In Takkula the colonists procure their firewood from distant forests and therefore are very careful in their use of it. The costs of importing wood are a considerable burden on the farming of the colonists. The yearly value of the woodland pasturage in the different colonies for single lots is computed by the author as follows:

	<i>Horses</i> Finnish marks	<i>Cows</i> Finnish marks	<i>Sheep</i> Finnish marks
Muddais	—	22	—
Sippola	8	16	—
Siikajarvi	—	16	—
Nipuli	8	24	5
Koskipää	12	39	8
Takkula	1	12	—
Seppälä	3	9	2
Average for a lot . . .	5	21	2

The sum of inheritances and presents received by the colonists during the time of the enquiry was 5,687 Finnish marks, an average of 67 Finnish marks for a lot or 6.27 for a hectare of land.

§ 7. CHANGES IN ASSETS AND LIABILITIES AND THE NET PROFIT MADE.

The two preceding sections have given the alterations in the single assets and liabilities and the groups of these. We will now resume and compare all assets and liabilities as they were both before and after the lots were

taken over and at the close of the period of enquiry. The net profit will then appear.

	Assets Finnish marks	Liabilities Finnish marks	Net profits Finnish marks
<i>For whole area.</i>			
Before lands were taken over . . .	176,060	11,055	165,005
After " " " " . . .	350,296	185,291	165,005
On 1 July 1912	644,235	281,051	366,184
<i>Average for 1 lot.</i>			
Before lands were taken over . . .	2,071	130	1,941
After " " " " . . .	4,120	2,179	1,941
On 1 July 1912	7,614	3,306	4,308
<i>Average for 1 hectare cultivated land.</i>			
Before lands were taken over . . .	203.22	13.07	195.15
After " " " " . . .	414.41	219.26	195.15
On 1 July 1912	712.89	309.50	403.39

From this it appears that assets, liabilities and net profits were notably increased during the period of enquiry. The relative values of single assets and their alteration can be seen from the following figures;

	Before lands were taken over	After lands were taken over	1 July 1912
Farming	60.9 %	80.3 %	86.6 %
Household	3.2 %	1.6 %	1.4 %
Secondary businesses	19.6 %	9.9 %	1.6 %
Personal possessions	16.3 %	8.2 %	5.1 %
Debts recoverable by colonists .	—	—	5.3 %
Total . . .	100 %	100 %	100 %

The largest part of this property was thus bound up with farming and its proportion to the whole capital invested increased from 60.9 per cent. before the land was taken over to 86.6 per cent. on 1 July 1912.

In the individual colonies the course of this process was various, according to whether before the lots were taken over there were already farms on their sites or not. In Koskipää, Nipuli and Siikajarvi the colonists found small farms ready-made at the time of colonization, and therefore the farming capital in these places was already considerable before the land was taken over. The same holds good for Seppälä colony where most of the colonists were previously torpars. Conditions were different in the colonies of Muddais, Sippola and Takkula where, before the land was taken

over, the capital invested in secondary businesses was most important. After the lots had been taken over the class of capital previously dominant continued to form a high percentage of the whole value involved, yet the distribution of the components of capital tended to be somewhat equalized in the different colonies, except in Seppälä colony where at the close of the enquiry the farming capital was in distinctly higher proportion than in the others.

The following table makes these facts clear :

Proportionate Distribution of Component Parts of Capital invested in the Colonies.

Components of Capital	Muddais	Sippola	Sii- kajarvi	Nipuli	Kos- kipää	Takkula	Seppälä
<i>Before land was taken over :</i>							
Farming	41.1 %	54.7 %	71.6 %	74.3 %	78.6 %	60.5 %	76.1 %
Household	2.6 %	3.4 %	5.1 %	3.8 %	3.7 %	2.3 %	2.8 %
Secondary businesses.	38.1 %	24.6 %	6.9 %	6.5 %	6.2 %	17.6 %	9.1 %
Personal belongings	18.2 %	17.3 %	16.4 %	15.4 %	11.5 %	19.6 %	12.0 %
Forestry etc.	—	—	—	—	—	—	—
Average for 1 lot in Finnish marks	100 % 2,679	100 % 2,781	100 % 957	100 % 1,309	100 % 2,908	100 % 2,450	100 % 1,380
<i>After land was taken over :</i>							
Farming	69.3 %	76.3 %	84.9 %	86.3 %	87.6 %	78.1 %	94.0 %
Household	1.3 %	1.8 %	2.7 %	2.0 %	2.2 %	1.3 %	0.7 %
Secondary businesses.	19.9 %	12.9 %	3.7 %	3.5 %	3.6 %	9.8 %	2.3 %
Personal belongings	9.5 %	9.0 %	8.7 %	8.2 %	6.6 %	10.8 %	3.0 %
Forestry etc.	—	—	—	—	—	—	—
Average for 1 lot in Finnish marks	100 % 5,132	100 % 5,305	100 % 1,794	100 % 2,457	100 % 5,050	100 % 4,405	100 % 5,470
<i>On 1 July 1912</i>							
Farming	87.1 %	87.4 %	86.9 %	87.8 %	81.0 %	83.8 %	92.6 %
Household	1.7 %	1.4 %	1.5 %	1.3 %	1.2 %	1.6 %	1.2 %
Secondary businesses	1.1 %	2.5 %	0.8 %	0.1 %	0.8 %	4.7 %	0.4 %
Personal belongings	5.9 %	5.8 %	4.7 %	5.3 %	4.0 %	6.4 %	3.7 %
Forestry etc.	4.2 %	2.9 %	6.1 %	5.5 %	13.0 %	3.5 %	2.1 %
Average for 1 lot in Finnish marks	100 % 8,386	100 % 8,607	100 % 4,269	100 % 3,994	100 % 10,545	100 % 8,926	100 % 12,168

For the purpose of a comparison with these figures the author gives also data as to the total assets of Siberian colonists. In Popov (1) these averaged in the colonists' lots investigated by him 1,365 roubles (2) a lot, distributed as follows :

Cattle and poultry	387 roubles	—	28.4 %
Farming implements, carts etc.	322 "	—	23.6 %
Buildings	316 "	—	23.1 %
Clothes	286 "	—	21.0 %
Crockery and furniture,	54 "	—	3.9 %
Total	1,365 "	—	100 %

The average percentage of the liabilities in the lots investigated was as follows :

	When lots were taken over	After they had been taken over	1 July 1912
	Percent.	Percent.	Percent.
Debt on the land	—	94.0	60.3
Other debts bearing interest . .	73.1	4.3	14.9
Current debts	26.9	1.7	4.1
Use of woodland,	—	—	20.7
	100	100	100

Thus when the land was taken over debts to savings banks and private persons predominated. After it had been taken over these items became, as compared with the debt on the land, almost negligible, but on 1 July 1912 were quite noticeable. The debt on the land although at first, as we have already said, there was no obligation on the colonists to make annual payments towards redeeming it, sank from 94 per cent, to 60.3 per cent. of the total sum of the liabilities.

The oscillations of these liabilities in the single colonies appear in the following table :

(1) *Angaben über die budget-wirtschaftliche Untersuchung von 75 Übersiedlerwirtschaften in den Kreisen Kustanaisk, Aktjnbinsk und Uralsk. Orenburg, 1911, pp. 10 et seq.*

(2) 1 rouble = about 2s. 1½ d. at par.

Relative Percentage of Chief Liabilities of Different Colonies.

Liabilities	Muddais	Sippola	Siikajarvi	Nipuli	Koskipää	Takkula	Seppälä
<i>Before lands were taken over:</i>							
Debt on land	—	—	—	—	—	—	—
Debts bearing interest	59.0	30.5	44.4	99.9	100	100	100
Current debts	41.0	69.5	55.6	0.1	—	—	—
Forest dues etc.	—	—	—	—	—	—	—
Average for 1 lot in Finnish marks	100 144	100 121	100 187	100 123	100 10	100 89	100 262
<i>After lands were taken over:</i>							
Debt on land	94.5	95.5	81.7	90.3	99.5	95.6	94.0
Debts bearing interest	3.2	1.4	8.1	9.6	0.5	4.4	6.0
Current debts	2.3	3.1	10.2	0.1	—	—	—
Forest dues etc.	—	—	—	—	—	—	—
Average for 1 lot in Finnish marks	100 2,597	100 2,645	100 1,025	100 1,271	100 2,152	100 2,044	100 4,352
<i>1 July 1912:</i>							
Debt on land	66.4	72.5	39.3	50.9	53.4	53.8	69.1
Debts bearing interest	17.8	5.7	10.2	19.3	9.9	28.8	11.6
Current debts	0.5	6.8	13.1	12.5	—	—	—
Forest dues etc.	15.3	15.0	37.4	17.3	36.7	17.4	19.3
Average for 1 lot in Finnish marks	100 3,552	100 3,472	100 2,196	100 2,297	100 3,478	100 3,521	100 5,853

Altogether assets have on an average increased by 84.8 per cent. of the value of the capital when the land was taken over, and liabilities by only 51.7 per cent. When the land was taken over the liabilities amounted to 52.9 per cent. of the total capital and on 1 July 1912 to 43.4 per cent. The debts have increased relatively only in Nipuli colony, namely from 51.8 per cent. to 57.5 per cent. Yet even here there was an increase of net profit. The increase of debts was to that of assets in the ratio of 32.3 to 100.

For one hectare of cultivated land the average increase of assets is valued at 298.48 Finnish marks, that of liabilities at 90.27 Finnish marks.

As the size of the farms increases so does the amount of both the assets and the liabilities, yet if the average for one hectare of cultivated land be calculated it is found that both decrease with the size of the farms.

The yearly increase of assets and liabilities in the single colonies appears from the following figures :

Average assets for a lot.

In Seppälä	yearly increase of	1,252	Finnish marks
" Sippola	" " "	987	" "
" Takkula	" " "	847	" "
" Muddais	" " "	751	" "
" Siikajarvi	" " "	741	" "
" Koskipää	" " "	665	" "
" Nipuli	" " "	455	" "

Average liabilities for a lot.

In Siikajarvi	yearly increase of	349	" "
" Nipuli	" " "	306	" "
" Seppälä	" " "	281	" "
" Takkula	" " "	277	" "
" Sippola	" " "	247	" "
" Muddais	" " "	220	" "
" Koskipää	" " "	162	" "

Additional figures will answer a question which has great interest for the whole enquiry. What was the colonists' net profit from the time the lots were taken over until 1 July 1912? The difference between the assets and liabilities gives this information:

In Seppälä	yearly increase of	971	Finnish marks, i. e. 5.33 a year
" Sippola	" " "	740	" " " 3.33 " "
" Takkula	" " "	570	" " " 5.33 " "
" Muddais	" " "	531	" " " 4.33 " "
" Koskipää	" " "	503	" " " 8.17 " "
" Siikajarvi	" " "	392	" " " 3.33 " "
" Nipuli	" " "	149	" " " 3.33 " "

This order is almost exactly that in which the colonies stood to each other in respect of their assets ; except that Siikajarvi and Koskipää colonies have changed places, the former from the fifth to the sixth place, the latter from the sixth to the fifth.

It is also interesting to establish the number of the colonists as compared with the increase in net profits, classified according to its extent, when the land was taken over and on 1 July 1912 :

Increase in net profits	When land was taken over.		1 July 1912	
	Number of Colonists	Average in Finnish marks	Number of Colonists	Average in Finnish marks
Up to 500 Finnish marks	8	312	3	366
From 500 to 1,000 " "	21	735	3	833
" 1,000 " 1,500 " "	15	1,245	9	1,233
" 1,500 " 2,000 " "	12	1,735	8	1,826
" 2,000 " 2,500 " "	7	2,328	6	2,237
" 2,500 " 3,000 " "	6	2,705	8	2,810
" 3,000 " 4,000 " "	3	3,239	8	3,651
" 4,000 " 5,000 " "	9	4,489	10	4,381
" 5,000 " 6,000 " "	4	6,234	9	5,599
" 6,000 " 7,000 " "	—	—	7	6,337
" 7,000 " 8,000 " "	—	—	2	7,404
" 8,000 " 9,000 " "	—	—	6	8,469
" 9,000 " 10,000 " "	—	—	1	9,368
10,000 and more " "	—	—	5	11,640
Average . . .	85	1,941	85	4,308

From this table it appears that the large number of colonists whose net profits when the land was taken over were between 500 and 2000 Finnish marks, was notably increased before the close of the enquiry. The colonists having net profits between 2000 and 6000 Finnish marks also became more numerous, in spite of the number whose profits came to be from 6,000 to 10,000 Finnish marks and more.

§ 8. INTEREST, WAGES OF LABOUR AND WAGES OF ENTERPRISE.

After he has shown the total results of the colonists' farming and the total increase of their property, the author seeks to describe the origin and constitution of this increase. As has been stated several times the ground rent is not included in the net profits of the colonists as here established by the author. The net profits have three constituents: interest on the capital invested in the farm, wages for the colonists' agricultural labour and wages for their enterprise.

As to the last two of these constituents it has been impossible to determine them because there are no data from bookkeeping and calculable

facts as to the part taken by the colonist families in the work on and outside the farms, and the returns of the farms to the families. It has been possible to calculate only the interest on the capital invested in the farms. As the result of the enquiry into the net profits of the 85 lots they have been, from this point of view, classified in three groups. The first group includes five colonists' farms which have suffered a reduction of capital: namely two in Muddais where such reduction has been of 1 per cent. and 4 per cent., and three in Nipuli where it has been of 2 per cent., 6 per cent. and 34 per cent.

The second group includes two farms which show at most a net profit of 5 per cent. on the capital invested in them. They are a colonist's lot in Nipuli and one in Koskipää on which the yearly increase is 2 per cent. of the capital.

The third group comprises 78 farms of which the capital has increased annually by 5 per cent. or more of its amount. In this group the colonists' farms have made a return not only of such 5 per cent. interest on capital but also of a surplus, distributed among the lots as follows:

Number of lots	Amount of surplus calculated for a lot	Average
27	Up to 200 Finnish marks	115 Finnish marks
20	From 200 " 400 " " "	318 " "
12	" 400 " 600 " " "	511 " "
9	" 600 " 800 " " "	710 " "
7	" 800 " 1,000 " " "	915 " "
3	" 1,000 and more " " "	1,088 " "

If the proportions obtaining within single colonies be studied the surplus, after 5 per cent. interest on capital has been deducted, is found to be as follows:

Name of Colony	Amount of surplus on a lot	Average for 1 lot
Nipuli	15 to 358 Finnish marks	84 Finnish marks
Koskipää	77 " 714 " " "	284 " "
Silkajarvi	82 " 550 " " "	314 " "
Takkula	23 " 937 " " "	396 " "
Muddais	43 " 1,101 " " "	407 " "
Sippola	74 " 1,070 " " "	565 " "
Seppälä	472 " 1,094 " " "	783 " "
Average for whole area	15 to 1,101 Finnish marks	355 Finnish marks

The annual gross profits of the colonists' farms are employed as follows :

- 1) the colonists' families have their livelihoods ;
- 2) they discharge their liabilities ;
- 3) they receive 5 per cent. interest on the capital invested in the farm, household and secondary businesses as well as
- 4) a yearly surplus averaging 355 Finnish marks for a lot.

*
* *

The author also endeavours to bring the amount of the net profits, as these vary with time, into relation with the factors influencing the farming of colonists, in order thus to establish a certain relation of cause and effect between these factors and the increase in the value of the property. General conclusions cannot here be drawn because the material for research and the data derived from bookkeeping are relatively too slight. It has been possible to discover only a tendency and to offer a cursory introduction to later studies.

Next the size of the lots is considered, and the absolute conclusion is at once made that the yearly increase in net profits rises with an extension in the area of the farms. But the development shows a tendency to an equalization of net profits with the original net profits of the time when the land was taken over.

If taken absolutely the original net profits are directly related to the yearly increase : the greater they are, by so much the greater are the yearly net profits. If taken relatively the increase is found to be greater in farms which had at first little value.

The available labour power in colonists' families has not notably influenced either absolutely or relatively the yearly increase in net profits. If the family be large it uses a proportionately large amount of the farm products, and various of its members must find exterior employment which seldom offers opportunities for saving. The amount of consumption and the available labour power of the families have however influenced the annual increase of net profits in the sense that the latter is proportionate to consumption. This relation, the connection between the growing value of the property and the needs it supplies, cannot be explained by the material of the enquiry.

The relation of the net profits to the different origins of single colonists' farms is shown as follows. The highest annual increase in value, absolute and relative, occurs in farms established on former sites of the dwellings of cottagers and labourers. Next come such farms as stand on land previously cultivated but having had no buildings ; thirdly the farms formed on land which had not been cultivated previously ; and lastly those on the sites of the labourers' leaseholds, the earlier torps, which show the least increase in annual profits.

Here also no general conclusions can be made ; first because the number of the investigated lots is too small ; and secondly because the effects

of this factor of the origins of the farms is influenced — strengthened or weakened — by other forces. Thus most of the torps — 31 of them altogether — lie in the colonies in which farming is at its weakest, namely in Nipuli and Koskipää.

The circumstance is nevertheless noteworthy that the yearly increase in value of the farms on the entirely new sites is higher than that of those occupying the sites of torps.

CONCLUSION.

We will now briefly resume all that is contained in the foregoing paragraphs.

The enquiry into the lots colonized by peasant smallholders has very indubitably given the information that the colonizing enterprise of the State has been crowned with success. By the institution of an especial credit fund for the landless population, by furnishing the colonists with cheap land credit, by the formation of a lease office, and by enlisting the aid of co-operation for the purpose of acquiring land, colonizing enterprise has succeeded in strengthening the position of the colonists as farmers of the lots they have acquired, in providing them with a sure livelihood, and in attaching them to their native soil. The happiness which once they sought over seas, which once called them to America, that belauded country, they now find more easily within their own land. Naturally much energy, activity and intense industry is demanded of the colonists : but nowhere can a man advance himself if he keep his hands in his pockets ; and from the social point of view the efforts which colonists must make on the land are certainly not more injurious to them than those incumbent on workers in factories and State industries. There must be economy, every step forward must be accompanied by economical housekeeping, if the development of a colonist's lot is to be at all reasonably profitable. But the awakening of an agricultural sense, the education in thrift especially of the unendowed populace — these constitute, as the author observes, so lofty, so important and so educational an aim, that it alone gives great significance to colonizing enterprise.

When the new State colonizing enterprise in Finland was initiated Professor Hamer Gebhard (1), the well-known creator of the Finnish co-operative movement, wrote as follows :

" There are too many families in Finland who own neither land nor house. There are at the same time vast extents of uncultivated territory of which part might be cultivated... It behoves that with the help of capital these two factors, the *man* and the *land*, be united : the result will be for

(1) *Atlas de statistique sociale sur les communes rurales de Finlande en 1901*. Helsingfors, 1908. p. 27.

Finland such hitherto unsuspected strength and new wealth as will contribute to making a better future for the country. It should be mentioned that the government and the representatives of the nation have taken this problem seriously, and they will doubtless find for it in the near future a happy solution ”.

It is with satisfaction that we can state that this prophecy already begins to be fulfilled and that colonizing activity has already borne good fruit. It has led, as we have seen, to a progressive development of the property of the colonists, and in so doing has indicated the lines which the colonizing policy of Finland should follow in the future.

SERBIA.

THE QUESTION OF FORESTRY IN THE KINGDOM OF SERBIA.

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Before examining the condition of sylviculture in the kingdom of Serbia it is necessary to note the two following facts :

1) Sylviculture in Old Serbia, that is within the land of the kingdom as it existed before the Balkan Wars, differs somewhat from sylviculture in the recently occupied country in respect of the wooded territory, the quality of the timber and the method of cultivating it.

2) All statistical data as to sylviculture in Old and in New Serbia have not the same value. Some are certainly very precise and very detailed, but others are summary and approximate.

Those which relate to the extent and the quality of the woods in Old Serbia are precise, for there the departmental administrative body carefully drew up the cadaster with a view to ascertaining these points ; but the data relating to the ownership of the woodlands should be considered as approximate and only partially exact. The commissions, which are called Commissions of Delimitation and were formed for the express purpose of determining on the ancient territory the limits of the properties of the State, the communes and individuals, have not yet brought the labours of the cadaster to an end everywhere, although they have existed for twenty-five years, and dependable statistical data are available only for the woodlands in which they have completed their task.

As regards the utilization of the woods in Old Serbia there are exact data only for the domanial forests. Those for the forests in private ownership are no more than approximately accurate.

Only summary data are available as to silviculture in the recently occupied territory. Immediately after the occupation a commission was nominated to study silviculture in the new territory. The departmental forest administrations, formed at the same time, were charged with the preparation of a provisional cadaster. The reports of this commission and these administrative bodies contain data as to the condition of silviculture in the new territory, but having been collected in only one year they cannot be more than summary and approximately accurate.

§ I. EXTENT OF WOODLANDS AND VARIETIES OF TIMBER.

Old Serbia. — Old Serbia has an area of 4,830,260 hectares (1). Of this the woods occupy 1,517,000 hectares, that is 31.4 per cent., and they comprise every species of tree which grows in Central Europe but especially beeches, oaks, Scotch and spruce firs and juniper-trees.

Beeches occupy 60 per cent. of all the woodland and are most numerous in the north. The fir woods which cover only 12 per cent. of the territory are most frequently found in the west (departments of Uzice, Ciacik and Kruscievaz). The oak woods form 23 per cent. of the woodland and are in the south (departments of Kruscievaz, Nish and Toplitza). This distribution is however not absolute but comparative: all the species enumerated may be said to exist all over the country.

More than half the woodlands — 60 per cent. — is formed of mixed trees. There are woods of beeches and oaks, and of oaks, beeches and firs. Only 40 per cent. of the woodlands consist of trees of a single kind.

All the woods of Old Serbia are mature and ready to be cut.

The most important wooded zones are the following:

1) In the east:

a) Miroci, a beech wood of 27,000 hectares:

b) Deli-Jovan, a beech wood of 7,000 hectares;

c) The wooded territory between the Porecika and the Danube and between the lines joining the towns of Golubaz, Despotovatz and Boljevatz, all beech wood and extending over 120,000 hectares.

2) In the west:

a) Maljen, a wood of beeches, oaks and firs having an area of 20,000 hectares;

b) Bozania, a wood of 15,000 hectares, of beeches and oaks;

c) Tara, a fir wood of about 25,000 hectares.

3) In the south-west:

a) Gocz, a wood of mixed firs on the slope and of beeches and oaks, having an area of more than 20,000 hectares.

(1) 1 hectare = 2 acres 1 rood 35.383 poles.

b) Golija, Cemerono and Copoanic woods, which occupy together 70,000 hectares and are of mixed firs and oaks.

4) In the south-east :

Jastrebaz, Topliza, Kukaviza, Suva Planina and Stara Planina, woods of mixed oaks and beeches which have a combined area of 130,000 hectares.

New Serbia. — New Serbia has an area of 3,800,000 hectares, of which 570,000 hectares or 15 per cent. are wooded.

It should be noted that in a period which is not yet very remote New Serbia was extremely rich in woods. During the last ten or fifteen years they have been burnt and destroyed by private persons and by government agents, by the former in order to gain pasturage for live stock and by the latter in order better to get rid of the comitadjis who infested the country.

The commission nominated by the Serbian government, to study the condition of silviculture in New Serbia, has established that 22,800,000 hectares — that is 60 per cent. of the woodland — are fitted exclusively for silviculture which might become a very lucrative branch of industry. The commission has proposed that all this land be reforested.

In respect of the quality of the timber New Serbia is like Old Serbia : the same trees are found although in slightly different proportions.

In New Serbia the beech and oak woods are most numerous. They cover almost equal areas and constitute together 80 per cent. of the woodland. The fir woods occupy only 15 per cent and are met with most frequently in the south (woods of Morihovo, Marijano and Malesc).

Most of the woods are mixed (woods of beeches and oaks, woods of firs and beeches). Woods of a single species of tree are very rare (Zlabar, Garvan, Korituic and the mountainous summits of Morihovo and Marijano)

The most important wooded zones are the following :

1) In the north :

a) Zlatar, a fir wood having an area between 6,000 and 7,000 hectares ;

b) Jarut, a wood of beeches and oaks, having an area between 4,000 and 5,000 hectares ;

c) Slona Gora, a fir wood of from 3,000 to 4,000 hectares ;

d) Rogosma, a wood of oaks and beeches of from 12,000 to 15,000 hectares ;

e) Copaonic, a wood of oaks and beeches — 15,000 to 20,000 hectares ;

f) Ciciaviza, a wood of beeches and oaks of 10,000 hectares.

g) Prapastiza, oaks and beeches — 12,000 to 15,000 hectares.

2) In the east :

a) Lisaz, a wood of beeches and oaks of from 4,000 to 5,000 hectares ;

b) Placiavita, a wood of oaks and beeches of from 15,000 to 16,000 hectares ;

c) Garvan and Goban, woods of beeches and oaks having a combined area of from 6,000 to 8,000 hectares.

- 3) In the south :
 - a) Marijanska Planina, a wood of firs with beeches and oaks on the slope, of from 10,000 to 12,000 hectares ;
 - b) Morihovo, a fir wood of 15,000 hectares ;
 - c) Petrinjské Planina, a wood of oaks and beeches of from 6,000 to 8,000 hectares ;
 - d) Baba and Buscieva Planina, a wood of beeches and oaks of from 5,000 to 6,000 hectares.
- 4) In the west :
 - a) Zegavaz, a wood of beeches and oaks of from 8,000 to 10,000 hectares ;
 - b) Caradaj, a beech wood of from 8,000 to 10,000 hectares ;
 - c) Milanovaz, a wood of beeches and oaks of 10,000 hectares ;
 - d) Blet, a wood of beeches and oaks of from 6,000 to 8,000 hectares.

§ 2. THE OWNERSHIP OF THE WOODS.

Old Serbia. — As has already been said Commissions of Delimitation, charged to determine property rights in the woodlands, were founded by the law of 1891, that is twenty-five years ago.

They began work in 1892 ; but their activity was limited to two or three months a year — July, August and September — and as it has not yet come to an end the ownership of many woods is still uncertain. It follows that the relevant statistical data are exact only for the woods in which the delimitation has been executed and approximate for all the others.

Most of the woods belong to the State and the communes. The State's property has an area of 620,000 hectares, that of the communes 580,000 hectares. The remaining woods belong to churches and convents as to 60,000 hectares and to private persons as to 257,000 hectares.

New Serbia. — Statistical data as to property rights in the woodlands are entirely lacking for this territory. The commission charged to study the condition of silviculture there neglected the question of ownership, for this is connected with the agrarian question which is the object of an enquiry by another commission.

Property in land in New Serbia has retained features characteristic of the feudal régime, and these are found in the woodlands.

The typical forms of landed property in New Serbia are the following :

- 1) Domain — that is the property of the State, administered and enjoyed by the State directly.
- 2) Mefat — the property of the State of which the use is left public.
- 3) Baltalic — the property of the communes. It is always doubtful whether the communes are owners in fact, or are merely usufructories of land jurisdictionally owned by the State.
- 4) Vakouf — the property of churches and convents. In the case of these also there is doubt as to whether the churches and convents are true owners or merely usufructories.

5) Coria — private property.

Coria is found in three different forms :

- a) Property in the true sense of the word, based on a legal title.
- b) Property resultant on usufruct, that is the property of a usufructory of the State who declares himself owner.
- c) Detention following on illegitimate occupation of lands belonging to the State or the communes (Mefat, Baltalic), the detainer having, after some years, declared himself owner.

The proportion in which these various kinds of ownership, of usufruct and of possession as the result of prolonged occupation exist, is unknown.

§ 3. THE UTILIZATION OF THE WOODS.

Old Serbia. — Until 1891, that is until the new law as to the woods was voted, it may be said that profit was derived from them by means of thefts of wood.

In the communal woods felling, which was effected without any State intervention, was considered to be the incontestable right of all individuals belonging to the commune. The mayor gave formal leave for it as need arose. The leave specified only the number of trees which might be cut down : their choice was left to individual discretion.

For tree-felling in State woods special leave from government officials was necessary. It was allowed freely on the sole condition that the timber should be used for the feller or his family if he were recognized to be poor ; otherwise he had to pay a small due.

In the form granting permission to cut down trees belonging to the State the number which might be felled was indicated. There was no restriction on choice.

It is not astonishing that this method of administering the woods caused their progressive disappearance, but the destruction was less than might be supposed. The smallness of the population and the lack of means of transport were obstacles to this unscientific employment of the woods.

The law of 1891 put a stop to it and gave a better basis to the utilization of woods.

According to the rules laid down by this law the State woods can be utilized only on the following conditions :

1) Before felling is allowed a scheme for it is drawn up by the Forest Administration.

2) The form giving permission to cut down trees not only specifies the number which may be cut down but also the condition that none may be felled except such as are indicated by the competent Forest Administration.

3) Tree-felling for a commercial or industrial object and on a large scale cannot be effected without reforestation, for which a scheme is drawn up by the administration.

4) The use of mountain pasturages and the utilization of acorns are limited as to season and area. The Forest Administration fixes the particular woodland and the time — that is when and where the animals may graze.

In addition to these rules, determining the utilization of the State woods, the law of 1891 is concerned with the communal woods and those in private ownership. Felling in communal woods is conditioned as in State woods. In woods in private ownership the conditions are a little less strict but in these also only trees indicated by the competent Forest Administration may be felled.

*
* *

The official statistics distinguish between wood cutting of three kinds:

- 1) woodcutting for firewood ;
- 2) woodcutting for domestic uses ;
- 3) woodcutting for commercial and industrial objects.

By woodcutting for firewood is meant only the cutting done by the peasants, to obtain wood which they or their families burn or which they sell in the towns in small quantities.

By woodcutting for domestic uses cutting done by peasants is also meant, in this case in order that they may make furniture or utensils or parts of agricultural tools (§ 46-50) (1).

Woodcutting for commercial and industrial objects comprises :

a) Such felling of large quantities of timber as is habitual to merchants.

b) The woodcutting of industrial workers and labourers whose material is wood.

c) Woodcutting by merchants dealing in wood.

Woodcutting for firewood and domestic uses and woodcutting by workmen whose material is wood occur in all the departments, in the State woods as in the communal woods and in those in private ownership.

Woodcutting by merchants dealing in wood takes place especially in the departments of Golubaz and Alessinaz where more than 80 per cent. of the timber felled altogether in Old Serbia is cut down.

Woodcutting for purposes of industry and by merchants dealing in wood takes place in the departments of Baina Bascta, Uzize, Pascka, Kraljevo, Proculje, Kruscevaz and Pirot. In Prouplje and Kruscevaz oak-wood is cut down, in all the others firwood. Both kinds of felling take place almost exclusively in the State woods ; such felling in the communal and private woods is quite negligible.

(1) While natural economy was in force woodcutting for domestic uses had a great importance which however is now diminishing more and more.

We show the amount of timber of the different categories derived from the fellings of 1911:

1. Woodcutting for	firewood	73,651	cubic metres (1)
2. " "	domestic uses.	17,029	" "
3. " "	commercial and industrial purposes:		
a) woodcutting for	firewood	120,000	" "
" by merchants, industrial workers and workmen whose material is wood		310,000	" "
		520,680	" "

Woodcutting for firewood and for the material of industry has met all the needs of the country in these respects.

The foreign trade in firewood and wood as material was at first unimportant, but latterly there has been a change. While in the past Serbia imported all her luxurious furniture from abroad, she has in recent years begun to export her wood and her imports of furniture have diminished more and more.

The following table gives data as to the export and import of wood.

Years	Import			Export		
	Firewood	Wood in raw state	Wood as material	Firewood	Wood in raw state	Wood as material
1908	45,580	473,395	395,355	134,829	1,569,254	1,229,893
1909	195,686	375,984	269,751	137,962	246,691	1,214,835
1910	164,341	329,498	260,009	145,360	450,280	956,340
1911	340,936	536,184	1,033,051	166,368	184,950	422,245
1912	113,335	507,122	839,318	255,413	389,415	999,416

* * *

Pasturage in the woods and the utilization of acorns are enjoyed on a large scale but the relevant statistics are known only as to the State woods. For 1915 they are as follows:

(1) 1 cubic metre = 1.308 cubic yards.

Pastured sheep	157,336
» cattle	21,786
» goats	13,438
» horses	2,680
» pigs	6,550

in addition to 23,583 pigs fed on acorns (1).

New Serbia. — The utilization of the woods of New Serbia consisted fundamentally, as in old Serbia, in the theft of wood.

It has been said that the large woods were burnt and destroyed. This was done :

1) By the "cipcije", the land serfs, who, since they held no land and cultivated the land of feudatories under the obligation of paying feudal dues, set fire to these woods in order to obtain new pasturage for their live stock, the keeping of which — since live stock were free from taxes — was their most lucrative form of activity.

2) By government agents who burnt the woods in order that they might not shelter comitadjis.

In the period of Turkish domination the government and the private woods were regularly utilized, but most unscientifically and without the exercise of any guardianship on the part of the State. So much was this the case that leave to cut wood in the government woods was obtained easily : by paying a very small due one might cut down at one's own discretion as much as one chose. As for private woods the State concerned itself not at all with them : the wood was cut at the full and absolute discretion of the owners.

Woodcutting was at this time undertaken to procure :

- a) firewood,
- b) green branches for feeding live stock,
- c) various kinds of wood.

Woodcutting for the two first of these objects was by itself very important ; that for the third was quite negligible.

In all New Serbia there were in this period only two saw-works, namely in the wood of Ozany which belonged to the convent of St. Troiza and in the wood of Majstorsca Tora which belonged to the manufacturer and merchant Necib Draga.

It is probable that the pasturage in the woods was very important, but no data allow a precise idea of it to be formed.

§ 4. FOREST ADMINISTRATION.

The ancient territory of the kingdom of Serbia is divided into twenty-four forest districts, each of which has its particular administration.

(1) The utilization of the acorns in the woods has been very important in the last twenty years during which the meat of the pigs called « palozife » has been much exported, but such exportation is diminishing progressively.

Each district administration comprises a chief administrator who is at its head, several subordinate administrators and a suitable number of keepers. The chief administrator must have studied in a secondary and the subordinate administrators in a secondary or primary school of forestry, while the keepers must have followed simple courses of instruction in forestry. As there are no schools in Serbia for this branch of knowledge the administrators, both chief and subordinate, must have studied abroad; but the courses of instruction in forestry for the keepers take place in Belgrade.

The central forest administration is part of the Ministry of Agriculture, Industry and Commerce, forming that one of its five sections which is called the forestry section. This has economic and jurisdictional divisions, of which the former directs the forest policy of the country, while the latter has charge of the delimitation of forest landed property and of summonses to appear in cases of contravention of the law in matters pertaining to forests.

* * *

If we study sylviculture in Serbia with any depth we perceive its two principal defects:

1) The division into forest departments, that is into forest departmental administrations, is inadequate. The departments are too vast: it is impossible for the administrator to superintend and control forestry within one of them and to adopt opportune measures in good time. This division must therefore be completely recast, less extent must be given to the departments, and the staff employed in each of them must be increased.

2) Reforestation, which has certainly been somewhat neglected, should be the object of more care. We have stated that the woods of New Serbia occupy only 15 per cent. of the total area while more than 60 per cent. is fitted for sylviculture. It is therefore necessary to reforest if not all the extent of territory admitting of reforestation at least a considerable part of it.

In Old Serbia, where the woods occupy 31.4 per cent. of the total area, the problem is easier to solve: the matter is merely one of building up the woods in proportion to the amount of tree-felling done. The law makes reforestation compulsory only in the case of felling for a commercial or industrial object. All other felling, whatever its object, has the effect of thinning the woods. It is therefore absolutely necessary to render reforestation compulsory in every case, and in every wood, whether public or private.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

FORMATION OF AGRICULTURAL COLONIES FOR THE INDIANS. — *Boletín oficial*,
Buenos Ayres, Number 6764, 9 August 1916.

The incorporation of the native population in civil life has for long constantly preoccupied the Argentine government, on account both of its social and of its economic advantages.

Recent decrees have attempted, within the limits allowed by the laws now in force, not only to solve the problem for the native groups in the south of the republic but also to form colonies which aim especially at giving a stable position to the Indians of the north.

As a consequence of colonizing necessities this undertaking has become particularly urgent, and a proposed law, submitted to the congress, aims at protecting the Indians from the manoeuvres of unscrupulous merchants and at encouraging their definite establishment in certain zones appropriated to them. Pending the voting of this law however administrative measures have been taken to obtain the same result immediately. Among them is the decree of 26 July 1916 which forms for the Tóbas and Pilagaes Indians two colonies for arable and live stock farming.

Numerous groups of these natives have expressed their desire to benefit by the arrangements made for the Indian tribes and to establish themselves at certain points of the Chaco and Formosa territory which they occupy already. After an enquiry made by government officials, which ascertained that these lands were appropriated to agriculture, two colonies for arable and live stock farming were formed, one in Chaco having an area of some 53,000 hectares (1), and the other reaching on the south to the Rio Pilcomayo and comprising about 85,000 hectares.

A new step has thus been taken towards the civilization of these tribes: they abandon the nomad state and agree to establish themselves in a fixed place and give themselves up to the work of agriculture.

(1) hectare = 2 acres 1 rood 35.383 poles.

AUSTRALIA.

CLOSER SETTLEMENT. — *Dalgety's Review*. Sydney, July 1916.

One very material effect of the war has been to check the subdivision of large estates suitable to closer settlement. As regards New South Wales, returns from the leading centres in each district show that the process of cutting up the larger estates has practically ceased. A few smaller properties have been sold in blocks, principally to adjoining holders, but the movement towards subdivision which was general a few years ago has stopped for the time. A few districts report that no estates large enough for subdivision are left, but generally the stoppage is ascribed to the financial stringency caused by the war, while in some centres the bad season has been another deterrent. The check is, of course, only temporary, and with the return of normal conditions closer settlement will again become important.

In the north generally subdivision is practically at a standstill. Part of the Conningdale estate in the New England district was for sale in seven blocks, aggregating 5,200 acres, of which four were sold to adjoining owners. A few station properties were sold right out, and a few homestead farms changed hands.

In the Warialda district there has been no subdivision, but it has been decided to subdivide some of the larger properties of which a few portions have already been sold privately. Holdings previously subdivided are being sold piecemeal, but the business is generally slack.

In the south the situation is practically the same, most centres reporting "nothing doing". The Clifton estate, Young, which comprised 5,000 acres was divided among five buyers. Woodlyn, Beckour, was cut up into four farms and sold; and Ringambil, Mirrool, is said also to have been sold for closer settlement. A few stations have sold, notably Willie Ploma, Gundagai, and Talbingo, Tumut, but generally there has been little business in this direction. In the Hillston district surveyors have been busy on the proposed railway from Griffiths to Hillston. A large area is expected to be thrown open to closer settlement shortly and the construction of this line is bound to lead to a closer settlement of the central division. In the west it is expected that subdivision will be resumed.

AUSTRIA.

AGRICULTURAL LABOUR IN DALMATIA. — KAUCKY (M). *Die landwirtschaftliche Lohnarbeit in Dalmatien. Der Arbeitsnachweis*. Vienna, Year 1916, Part. 5.

Dalmatia, which suffers permanently from a great scarcity of labour, is not only that one of all the Austrian crown lands which is poorest in fertile land, but is also that in which wages are highest.

The high wages seem to be due to three causes :

(1) *The absence of a real labouring class.* — This is due to the circumstances that the peasants were, even before 1848, free from all subjection ; that the Southern Slav institution of the “ Hauskommission ”, partially preserved, ensures to each man a share, however small, of landed property ; and that the extent of the common lands — pasturage and heath — provides even the poorest with the minimum indispensable to life. Further the nearness of the sea affords various sources of profit.

In the time of Venetian rule the noble landowners already complained of the high wages, which, they alleged, made the profitable cultivation of vines impossible. This is the reason for the extraordinary extension of *métayage* in Dalmatia. That land should be farmed by the holder's family is the rule ; and holders who are not farmers, or who cannot cultivate their lands through the members of their families, usually grant them on lease to *métayers*. In these conditions there is only a limited demand for wage-earning labour.

(2) *The technical character of the agriculture.* — Dalmatia has always been a vine country, that is a country of intensive agriculture in which secondary crops are insignificant and most frequently much neglected, and live stock has little importance. The result has been an unscientific distribution of labour which entails sometimes unemployment, sometimes high wages, without relation to the conditions of life among the rural population in the seasons of their principal labours — those of the vintage and of weeding. The vintage can employ women and children, but weeding needs the strength of a grown man, and it is in the period in which it is practised that the highest wages are paid. When this season is past the need for labour is less, and wages sink to some extent, chiefly as regards the part of them paid in kind.

(3) *The emigration to America, Australia and New Zealand which is principally caused by the crisis in viticulture.* — The desire to emigrate has taken deep root and become inherent in the Dalmatian mentality.

It may be affirmed that ten per cent. of the agricultural population, that is some 50,000 persons who include the best elements of the Dalmatian people, are employed in foreign countries. The resultant and constant lack of labour cannot be counterbalanced by the use of machinery, for machines are not to be thought of in cultivating vines. The same limitation applies, except in a few districts, to the other crops, a fact sufficiently explained by the configuration of the soil of Dalmatia.

An occasional fall in the price of wines, such as occurred some years ago, was not followed by a noticeable fall in wages. Its only marked result was a recrudescence of emigration to America and an aggravation of the scarcity of labour. Viticulture depends on a permanent investment of capital and allows small scope to the adjustment of labour according to the probable yield. Therefore wages must be looked upon not as costs of production, properly so called, but rather as costs of upkeep for which there should be compensation in good years.

The present war has caused on the whole an important rise in wages.

At Lissa in the middle of March 1914 they were from 5 to 5.50 crowns (1) a day, in addition to breakfast and a midday meal which included wine. Therefore for a working-day, lasting from seven in the morning until five in the evening, the actual value of the wage was more than 8 crowns. In some cases it was even 10 crowns.

The wage generally comprises the labourer's keep, valued at from 2 to 2.4 crowns a day, as well as from 1.20 to 2 crowns a day in cash.

When several labourers of unequal strength, skill and energy are engaged together they usually receive a uniform wage. Cash wages and keep — that is total wages — vary greatly in different districts.

Seasonal migrations to the Dalmatian vineyards are unimportant as compared to the need for labour. In the south Montenegrins have hitherto thus migrated to the Gulf of Cattaro and the Ragusa district.

In the north and centre of Dalmatia there is, on the other hand, a seasonal migration of labour from Zagorje, the Dalmatian hinterland and the home of the valued Dalmatian servants. The population is here chiefly occupied by live stock and cereal farming and therefore lacks employment at the exact time at which work is in full swing in the vine district.

In Zagorje itself, where the conditions of existence are primitive, wages are much lower than elsewhere in Dalmatia, but as regards the work they provide the labourers of this district are far behind those of the coast districts and the islands.

In Zagorje a rise in wages is also to be observed, for the cultivation of vines is gaining ground in the valleys which have a good exposure, and emigration is increasing steadily. Moreover the saw-works of the Bosnian forests and the cement factories of the coast have an undeniable attraction for the border populations. The construction of the proposed railways will have the effect of further raising wages.

(1) 1 crown = about 10d at par.

INTERNATIONAL INSTITUTE OF AGRICULTURE

BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

**INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS**

**(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)**

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**ROME
PRINTING OFFICE OF THE INSTITUTE
1918**

THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Sixteen other governments have since adhered to the Institute.

It is a government institution in which each country is represented by delegates. The Institute is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and, if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance, and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

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EXPLANATORY NOTE

1. *The present Table of Contents refers to the twelve numbers of the International Review of Agricultural Economics published from January to December, 1917, and includes, therefore, all the articles and notes dealing with co-operation, insurance, credit and agricultural economy in general contained in these volumes.*

2. *The articles and notes relating to co-operation have been grouped in 22 classes ; those dealing with insurance are divided into 4 classes ; those which deal with credit into 9 classes ; and those which treat of agricultural economy in general into 17. A complete list of these classes precedes the table. In our classification we have followed the rule of single entry and placed under only one heading those articles and notes which, from the nature of the subject treated, might appear in more than one group.*

As it is not in every case clear why an article or note has been assigned to one group rather than to another, the reader must be prepared to refer to the several analogous groups in any one of which a particular article or note might appear. A dairymen's co-operative society, for example, might have as its object the protection of the general economic interests of dairy farmers as a class, or simply the improvement of the methods of production, transport, and sale, or again the purchase and collective use of animals of the special dairy type. An article relating to such a society might appear under various headings, according as it dealt more particularly with one or other of these objects.

3. *In each group the articles and notes have been subdivided by countries, following the alphabetical order. For each country the articles are arranged in the chronological order in which they were published. We have added a table giving the classification by countries.*

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INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS
(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXIV.
8TH. YEAR: NUMBER 2
FEBRUARY, 1917.



ROME
PRINTING OFFICE OF THE INSTITUTE
1917

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Part I: Co-operation and Association

GERMANY.

THE GENERAL RAIFFEISEN FEDERATION OF NEUWIED IN 1914-1915.

SOURCE:

JAHRESBERICHT DES GENERALVERBANDES LÄNDLICHER GENOSSENSCHAFTEN FÜR DEUTSCHLAND E. R. FÜR 1915 UND STATISTIK DER RAIFFEISENSCHEN GENOSSENSCHAFTEN FÜR 1914
(*Annual Report of the General Federation of Rural Co-operative Societies in Germany for 1915 and Statistics of Co-operative Societies of the Raiffeisen Type in 1914*).

At the end of 1915 there were in Germany 28,652 rural co-operative societies of which 5,680 or 20 per cent. belonged to the General Raiffeisen Federation, 16,857 or 58 per cent. to the General Federation of German Rural Co-operative Societies of Offenbach, and 6,115 or 22 per cent. to the nine independent district federations.

The General Raiffeisen Federation includes members of two kinds, direct and indirect members.

Its direct members are : one central bank ; fifteen central co-operative societies of which six are co-operative banks and nine co-operative stores ; thirteen district federations, of which two have their headquarters at Berlin, and one each at Brunswick, Breslau, Dantzig, Erfurt, Frankfort-on-Maine, Cassel, Coblenz, Königsberg, Ludwigshafen, Nürnberg and Strasbourg.

The indirect members are 1,598 co-operative credit societies ; and 1,066 co-operative societies not transacting credit operations, namely sixty-five

consumers' societies, 489 societies for the sale of agricultural products, 445 societies of labour and production, and sixty-seven mixed societies.

The General Raiffeisen Federation underwent several changes in 1915. Eighty-four new indirect members, of which forty-eight were co-operative credit societies, adhered to it; and twenty-three members, eight of them co-operative credit societies, ceased to belong to it. The net increase was thus one of sixty-one members, forty of them co-operative credit societies and twenty-one of them co-operative societies of other types. The net increase was one of 137 in 1914, and one of 196 in 1913.

The changes were as follows in as far as they concerned direct members: the two Mecklenburgs separated themselves from the district federation of Berlin and a special federation was founded in them; two new co-operative stores were founded,

* * *

The business of all these co-operative societies has been much affected by the war. In the annual report the management signalizes the following events as having had a great influence on their activity:

1. Economic activity and the demand for credit have diminished, owing to mobilization, to the economic blockade which has cut off Germany from foreign markets, to the reduction of purchases to the absolutely necessary minimum, etc:

2. The increased circulation of paper which rose from its level of 4.8 thousand million marks (1) at the beginning of the war to one of 6.9 million marks at the end of 1915.

3. The reduced demand for credit and the increased circulation of paper have caused uninvested large capital to be sent to the banks instead of to co-operative credit societies. This has disturbed the equilibrium of the relations between the banks and their clients. Debtors' accounts have diminished and those of creditors have increased. In order to invest this money which comes to them profitably the banks have lent considerable sums to the communes and the State.

4. State intervention in the economic life of private citizens has noticeably increased, especially as regards the trade in foodstuffs. This is monopolized by the State, or rather by institutions created to such end, of which at the end of 1915 there were about thirty. They have used the co-operative stores which has increased the amount of business done by these.

5. Mention should finally be made of the constant or temporary interruption of the work of co-operative societies within the war zone.

Having made this general review we will now give a more detailed account of the different types of co-operative societies.

(1) 1 mark = about 11 ³/₄ d at par.

§ I. THE CENTRAL BANK.

The Central Bank (*Landwirtschaftliche Zentraldarlehnskasse in Neuwied*) Stock Society maintains a balance of credit among all co-operative societies belonging to the General Raiffeisen Federation.

Its shareholding members are all the co-operative credit societies belonging to this federation ; saving that :

1) it does not include as shareholding members sixty Bavarian and 158 Pomeranian co-operative societies although they belong to the General Raiffeisen Federation,

and 2) it does include as shareholding members, although they do not belong to this federation, 256 co-operative credit societies which were at first members both of the federation and of the Central Banks but have ceased to belong to the former while remaining in the latter.

The sphere of the Central Bank includes not only its shareholding members but also all co-operative societies belonging to the General Raiffeisen Federation, that is all of them other than the credit societies, all the co-operative banks and all the co-operative stores forming part of the General Raiffeisen Federation.

The headquarters of the Central Bank are at Neuwied. It has branches in all the district federations, one in each. Until 1909 there was a store attached to each branch, as a section of it. From 1909 these stores were replaced in Berlin, Breslau, Brunswick, Dantzig, Erfurt, Cassel and Coblenz by independent co-operative stores, but at Königsberg, Frankfort-on-Maine, Ludwigshafen, Nürnberg and Strasbourg they are still open as sections of the respective branches.

At the end of 1915 the Central Bank had 4,636 shareholding members. In 1914 it had 4,785, that is 149 more, which is because in 1915 sixty Bavarian and 158 Pomeranian co-operative societies ceased to belong to it while it was joined by sixty-nine new members.

Up to 1913 the capital in shares was of 10,000,000 marks. On 13 June 1913 a vote was given in favour of raising it to fifteen million marks. Of this sum 12,453,750 marks had been paid up at the end of 1914. During 1915 the remainder, namely 2,546,250 marks, was paid up ; and in December 1915 the increase of the capital to twenty million marks was voted.

The movement of money between the Central Bank and its shareholders, the rural banks, has been noticeably accelerated in comparison with previous years, as is seen from the following figures :

1913	359,608,000 marks
1914	318,297,000 "
1915	691,269,000 "

If such total movement be analysed into its component parts, that is receipts and expenditure, it is seen that during the war the increase of re-

ceipts has been much larger than that of expenditure. While before the war receipts were always less than expenditure, the converse has been true during the war, as is seen from the following data :

	1913	1914	1915
Receipts	178,186,000 marks	183,051,000 marks	390,605,000 marks
Expenditure	181,422,000 "	155,246,000 "	300,664,000 "
Excess of Receipts.	—3,236,000 "	+27,805,000 "	+89,941,000 "

The excess of receipts over expenditure would have been even greater in 1915 if important sums had not been deducted for the purpose of subscribing to the public debt. The following sums were subscribed to it in the Central Bank, its branches and the rural banks :

10,000,000 marks to	1st. war loan	.
45,000,000	" " 2nd.	" "
85,000,000	" " 3rd	" "
127,000,000	" " 4th.	" "

It is calculated that for the purpose of these subscriptions the sum of 132 million marks was taken from the Central Bank ; which is to say that ordinary expenses amounted only to 168,664,000 marks, or 221,941,000 marks, less than the receipts.

The deductions for the purpose of subscription to the public debt are very noticeable if the amounts of monthly expenditure be considered. They were as follows :

January	7,587,000 marks	July	13,329,000 marks
February	6,907,000 "	August	8,053,000 "
March	36,339,000 "	September	103,321,000 "
April	47,319,000 "	October	30,607,000 "
May	6,404,000 "	November	10,251,000 "
June	9,191,000 "	December	21,356,000 "

In the months of April, September and October, those namely in which subscriptions were made to the public debt, the sum taken from the Central Bank was from six to ten times greater than in the other months.

Since receipts exceeded expenditure there was a disturbance of equilibrium as regards the reciprocal relations between the Central Bank and its shareholders. While before the war the Central Bank was always the

creditor of its shareholders, it has become during the war their debtor, as is shown by the following figures which refer to marks :

	31 December 1913	31 July 1914	31 December 1914	31 December 1915
Debit Account .	79,009,000	79,100,000	96,281,000	166,744,000
Credit " .	82,004,000	83,900,000	72,737,000	45,300,000
Excess of Credit			Excess of Debit	
Account . .	3,031,000	4,800,000	Account . . .	23,544,000
				129,144,000

The movement of money between the Central Banks and the co-operative societies other than credit societies, and such movement between the Central Bank and the district co-operative banks, has the same characteristics, although the disturbance of equilibrium, which has been shown, is in this case only to be foreseen and not yet accomplished. The Central Bank is still the creditor of these co-operative societies, but its credit with them has much diminished.

a) *The Central Bank's account with the district co-operative banks.*

		31 December 1914	31 December 1915
Credit Account	marks	4,340,000	3,140,000
Debit "	"	440,000	940,000
Excess of Credit Account	"	3,900,000	2,200,000

b) *with co-operative societies other than credit societies.*

		31 December 1914	31 December 1915
Credit Account	marks	10,238,000	6,038,000
Debit "	"	720,000	1,343,000
Excess of Credit Account .	"	9,518,000	4,695,000

The movements of money between the Central Bank and the co-operative stores has an entirely contrary aspect. Since the trade of these stores has, as we shall presently see, increased, their debts to the Central Bank have increased also.

At the end of 1915 these debts amounted to 5,565,553 marks as against

a credit of only 141,088 marks. This represents an increase of three million marks on the debts at the end of 1914.

The same causes have led to an increase of the capital employed in the trading sections of the branches of the Central Bank. At the end of 1914 only 4,700,000 marks was thus employed but on 31 December 1915 this sum had come to be 8,500,000 marks.

The movement of money between the Central Bank and the large banks, that is those furnishing money in the form of loans, has an aspect like that, already described, of the movement between the rural banks and the Central Bank. Since receipts exceed expenditure and there is thus a balance of money, the Central Bank instead of taking loans pays money in quantities to these large banks, so that from their debtor it has become their creditor.

The debit and credit accounts of the Central Bank with these banks give the following figures :

	31 December 1913		31 December 1914		31 December 1915
Debit Account . . . marks	20,984,000		3,060,000		3,000,000
Credit " . . . "	824,000		5,281,000		15,658,000
<hr/>			<hr/>		
Excess of Debit Account "	20,160,000	Excess of Credit Account marks	2,221,000		12,658,000

Since the Central Bank has a considerable balance in money, its credit with these large banks would be yet more important if this balance were not employed on investments to which before the war there was little or no recourse.

It has been invested in a) State bills ; b) loans to communes ; c) participation in the business of co-operative producers' societies.

On 31 December 1915 the bank held State bills of the value of 18,839,166 marks ; whereas on 31 December 1914 the value of those it held was 7,800,162 marks, and on 31 December 1913 it was 3,680,616 marks.

Its loans to communes amounted on 31 December 1915 to 83,272,574.62 marks. It then participated in the business of co-operative producers' societies to the extent of 920,050 marks.

To give a clearer idea of the business of the Central Bank we reproduce some items of its balance-sheets :

	31 December 1913	31 December 1914	31 December 1915
Number of shareholders	4,700	4,785	4,636
Paid-up capital	11,485,250	12,453,750	15,000,000
Turn-over of bank	1,398,300,000	1,424,500,000	3,398,300,000
State bills held	3,680,616	7,800,462	18,839,166
Credit account with rural banks	82,041,701	73,366,856	45,299,833
Credit account with non-credit co-operative societies.	16,019,038	18,614,365	17,675,864
Including credit account with producers' co-operative societies .	?	10,238,000	6,038,000
Credit account with communes . .	—	?	83,272,575
Credit account with large banks . .	824,304	5,281,028	15,057,948
Debit account with rural banks . .	79,010,442	96,367,740	166,744,206
Debit account with non-credit co-operative societies.	1,988,561	5,756,727	5,877,249
Debit account with large banks . .	20,984,324	3,059,944	3,000,000

§ 2. *District Co-operative Banks for Co-operative Societies other than Credit Societies (Zentralkassen für Betriebsgenossenschaften).*

As has been seen the Central Bank grants loans to co-operative societies. Before 1912 however its relations with these societies were little developed for its by-laws did not allow it to grant loans on current account.

In order that these societies might command credit of this description co-operative banks for non-credit co-operative societies were formed wherever there were branches of the Central Bank, and they acquired the legal form of registered societies of limited liability.

All co-operative societies other than credit societies in the district, that is all belonging to the local district federation, are accepted as shareholding members of these banks. Co-operative societies not belonging to the federation and individuals may be admitted to the same status exceptionally.

The co-operative banks maintain a balance of credit among their members.

In practice they have shown no great vitality. This is due to the fact that the credit necessary to the producers' co-operative societies is of a different kind from that required by the credit co-operative societies. The producers' co-operative societies need large capital to be used for building machines etc: that is capital which may be sunk permanently — and this involves a need of long-term loans. They rarely command free capital which they can place at the disposal of the bank having the duty of maintaining the balance of credit.

Since these co-operative banks could not satisfy the needs of the producers' co-operative societies, the by-laws of the Central Bank were modi-

fied in 1912 to allow it to grant loans on current account to these societies, and to issue bonds based on these loans. Since 1912 the business of the Central Banks with non-credit co-operative societies has increased, while the business of the credit banks has diminished more and more and several of them have been wound up.

At the end of 1914 there were six co-operative banks for non-credit co-operative societies in Breslau, Dantzig, Cassel, Ludwigshafen and Strasbourg, but the three latter are being wound up.

On 31 December 1914 the number of members was as follows :

	Number of Members.		Total. —
	Producers' Co-operative Societies —	Other Co-operative Societies & Individuals —	
Breslau	187	13	200
Dantzig	86	35	121
Cassel.	16	5	21
Cologne	8	9	17
Ludwigshafen	11	10	21
Strasbourg	6	7	13
	314	79	393

On 31 December 1913 the capital in shares was as follows :

	Number of Shares —	Paid-up Capital —
Breslau	5,234	1,055,480 marks
Dantzig	1,867	370,162 "
Cassel.	865	173,000 "
Cologne	584	5,840 "
Ludwigshafen	4,946	98,920 "
Strasbourg	462	9,260 "
	13,958	1,712,662 marks

The working capital was as follows :

1913	23,852,966 marks
1914	19,856,625 "

The business of the co-operative banks is shown by the following table which gives several items of the balance sheet of 1914. The numbers refer to marks.

	Breslau	Dantzig	Cassel	Cologne	Ludwigs- hafen	Strasbourg	Total
Turn-over	51,469,266	331,000,000	42,177,000	500,000	1,224,500	5,187,200	431,557,966
Credit Account with members	5,640,236	7,573,065	1,480,381	468,476	1,522,147	1,020,500	17,704,815
Credit Account with banks	—	35,000	84,406	—	83,000	—	202,406
State bills held	3,937	136,932	11,192	—	—	—	152,061
Debit Account with members	517,982	3,206,000	257,602	—	25,561	58,014	4,065,159
Debit Account with banks	1,714,273	122,000	—	—	1,335,662	839,553	4,011,488
Deposits	2,378,182	4,632,000	969,314	448,339	442,725	90,393	8,960,953

As statistical data for 1915 are lacking, changes brought about by the war cannot be shown; yet it may fairly be stated that the war has produced in the business of these institutions the same changes as those we have noticed in the business of the Central Bank.

§ 3. *The Co-operative Stores* (Zentralwareninstitut). — The co-operative stores, of which the first was formed in 1909, aim at ensuring to the rural co-operative societies the advantage of buying and selling in the gross. They have direct relations only with the co-operative societies, that is to say they buy and sell merchandise on behalf of the societies, not on behalf of the members of these. Until 1909 the purchase and sale of goods on behalf of the societies was practised by the Central Bank, by means of its sections which were especially responsible for the goods. Since that year the Central Bank has sought to supersede these special sections by the co-operative stores which it is endeavouring to form.

At the end of 1915 there were nine co-operative stores of which two had been formed in December, so that only seven practised the purchase and sale of goods in 1915. These stores are at Berlin, Brunswick, Breslau, Dantzig, Erfurt, Cassel and Coblenz. The special sections belonging to the Central Bank still exist at Frankfurt-on-Maine, Königsberg, Ludwigs-hafen, Nürnberg and Strasbourg.

The legal form of the co-operative stores is that of registered societies of limited liability. Only one of them, that at Berlin, is a stock company (1).

(1) In 1914 a Centre of the Co-operative Stores was formed with the object of buying and selling merchandise on behalf of these stores.

All co-operative societies belonging to the General Raiffeisen Federation are admitted as shareholding members, as are individuals in the case of a special permission. On 31 December 1915 the seven co-operative stores numbered altogether 2,575 members; 2,397 of these being rural banks, eighty-five of them non-credit co-operative societies, and ninety-three of them individuals. As compared with 1914 the increase was one of 151 members.

The co-operative stores buy and sell merchandise on behalf of their members, and on behalf of all the co-operative societies constituting the General Raiffeisen Federation, even if these be not members.

The activity of the co-operative stores and of the sections of the Central Bank which deal in merchandise extended before the war over the following field :

1. The sale of merchandise in the market on behalf of the co-operative societies.
2. The purchase of merchandise in the market on behalf of the co-operative societies.
3. The purchase of merchandise from the co-operative societies and the sale thereof to them.

Beyond such business the sale in the market of merchandise bought there is effected from time to time, but only in the case of a stores having miscalculated the demand and the supply of co-operative societies.

Since the beginning of the war changes have been introduced into the business of co-operative stores : a) their trade on their own account, that is their sale in the market of merchandise bought there, has increased ; b) trading commissioned by the State and the communes has been introduced. The activity of the co-operative stores and of the sections dealing in merchandise has, as we shall see, increased during the war, and consequently it has been necessary to increase the capital in shares. The five co-operative stores have increased their capital in shares as follows :

Berlin	from	800,000 marks	to	1,000,000 marks	of which	941,000 marks	is paid up
Breslau	"	1,000,000	"	1,500,000	" " "	1,200,000	" " " "
Dantzig	"	1,500,000	"	1,800,000	" " "	1,800,000	" " " "
Erfurt	"	1,000,000	"	1,500,000	" " "	1,013,750	" " " "
Cassel	"	500,000	"	1,000,000	" " "	612,750	" " " "

At the same time the working capital has been increased from 21,527,240 marks to 31,093,246 marks.

The Central Bank has similarly increased the capital employed in its commercial sections from 4,700,000 marks to 8,500,000 marks.

The trade of the co-operative stores and the commercial sections has noticeably increased, as is shown by the following table.

The value of the merchandise bought and sold was :

1913	135,721,137 marks
1914	157,630,291 "
1915	299,272,490 "

The statistical data do not distinguish between trade on behalf of the co-operative trading societies and trade on commission on behalf of the State and the communes. If however the trade in each kind of merchandise be considered separately, it is seen that the increase we have indicated has been caused exclusively by the trade on commission on behalf of the State and the communes, while the trade on behalf of the co-operative societies has rather diminished than otherwise.

In order better to observe the influence of the war on the business of these establishments we think it will be well to compare their trade in the period before the war with their trade during the war. We will take, as an instance, their trade in the period between 1 January 1913 and 30 June 1914, and will compare it with that which they accomplished between 1 July 1914 and 31 December 1915.

Articles of Merchandise	Quantities in Zentners (1)		Difference in terms of percentage
	1 Jan. 1913 — 30 June 1914	1 July 1914 — 31 Dec. 1915	
Manure	16,313,519	10,419,045	— 36.1
Forage	5,660,237	5,599,451	— 1.1
Seeds	132,589	125,379	— 5.4
Combustibles	15,292,752	16,249,109	+ 6.3
Corn	11,198,776	19,182,257	+ 71.3
Total . . .	48,597,873	51,575,241	+ 6.1

(1) Zentner = 110.25 lbs.

Articles of Merchandise	Value in Marks		Difference in terms of percentage
	1 Jan. 1913— 30 June 1914	1 July 1914— 31 Dec. 1914	
Manure	53,571	35,582	— 33.6
Forage	38,763	64,770	+ 67.9
Seeds	4,258	4,530	+ 6.5
Combustibles	10,798	10,876	+ 0.7
Corn	90,194	237,879	+ 163.7
Total . . .	197,582	353,641	+ 79.2
Machines	9,633	6,119	— 36.5
Other articles	8,647	14,987	+ 73.3
Total . . .	215,862	374,748	+ 73.6

If we examine the trade in each kind of merchandise separately we arrive at the following conclusions :

1. The trade in manure has diminished during the war, in quantity as in value. The diminution in quantity has however been greater than that in value, which is to say that prices have risen. The diminution of the trade is due to : a) the fact that importation from abroad has become impossible (saltpetre, guano) : b) the large quantities of manure employed for military purposes (azote, sulphuric acid).

2. The trade in forage has diminished in respect of quantity but only to an insignificant extent, in spite of importation from abroad having been impossible. The pre-war trade in imported forage has been replaced by commissioned trade on behalf of the State : large quantities of bran have been sold and distributed by the institutions on behalf of the State.

As regards the value of the trade in forage it has increased by 67.9 per cent. during the war, which is to say that prices have risen noticeably.

3. The trade in seed has diminished in respect of quantity but, on the other hand, has increased in respect of value. Hence prices have risen here also.

The diminution in quantity is due to the fact that importation from abroad has become impossible.

4. The trade in combustibles has slightly increased, but such increase depends partly on the commissioned trade on behalf of the State and the communes.

5. Very great changes have occurred in the trade in corn, an article of merchandise in which the trade has been monopolized by the State.

The trade in corn shows an increase during the war of 71.3 per cent. in respect of quantity. This figure refers exclusively to trade on commis

sion for the State. As regards value the trade has increased by 163.7 per cent., which is to say that prices have risen very much.

6. The trade in machines during the war has diminished in respect of value by 3.5 million marks, that is by 36.5 per cent. In the annual report it is noted regretfully that the diminution is not due to a decreased demand but to a decreased supply, the importation of machines from Great Britain and the United States having become impossible during the war.

7. The trade in goods comprised by the heading "other articles" has increased by 73.3 per cent, during the war. The whole of such increase is in the commissioned trade in potatoes on behalf of the State, as is seen by the following table which shows the trade in potatoes of the co-operative stores of Brunswick, Dantzig, Koenigsberg and Nuremberg (1).

	Quantity.	Value
1 Jan. 1913 to 30 June 1914	355,481 zentners	955,000 marks
30 June 1914 " 31 Dec. 1915	563,434 "	2,542,000 "

As is seen by these figures the quantity has increased by 58.5 per cent and the value by 166.1 per cent., which is to say that prices have risen.

We are therefore in a position to draw the following conclusions:

a) The trade on behalf of co-operative societies in all articles of merchandise has diminished in respect of quantity. In respect of value, only the trade in manures has diminished, while the trade in all other articles of merchandise has increased owing to the considerable rise in prices.

b) The trade on commission on behalf of the State, which is a quite new form of activity for these institutions, has been very important especially where it has concerned corn and potatoes, and in fact all foodstuffs.

(1) The other institutions give no figures regarding the trade in potatoes.

CANADA.

THE CO-OPERATIVE SALE OF WOOL.

SOURCES :

- THE WORK OF THE CO-OPERATIVE WOOL-MARKETING SYSTEM, in *The Farmer's Advocate*, No. 1256, London, Ontario, 19 October 1916.
- SUCCESSFUL CO-OPERATION BY SHEEP BREEDERS IN QUEBEC, in *The Farmer's Advocate*, No. 1245, London, Ontario, 3 August 1916.
- CO-OPERATIVE MARKETING OF WOOL, in *The Agricultural Gazette of Canada*, Ottawa, October 1916.
- ARKELL (T. Reg.): Chief of Sheep Division, Preliminary Report of Wool-grading Operations, 1916, *ibid.*

§ I. GOVERNMENT ACTION FOR THE GRADING OF WOOLS.

The enthusiastic support given by the Canadian government to the development of co-operation within its territory is well known, as are the excellent results already obtained by the organizing work it has inspired.

Wool production and the trade in wool afford another example of the usefulness of co-operation to farmers. An effort which had its co-ordinated beginning only three years ago has given rise to a new situation which is full of promise for the future and is already of great benefit to the producers as well as to the wool industry.

The central government's propaganda and that of the provincial governments in favour of the co-operative sale of wool has been fruitful more or less everywhere, although in some provinces this method of sale is still in its initial period.

Most farmers having a flock of sheep were formerly at the mercy of woolmerchants who wandered about the country, from farm to farm, making offers which the producer was in most cases obliged to accept, however little he liked them, unless he wished not to market his produce. The prices paid on the spot by these dealers or their agents were naturally much lower than those obtained in the large markets, and the small sheep-farmer was thus deprived of the greater part of the profit which ought to have accrued to him. It followed that he almost ceased to take interest in the improve-

ment of his flock and was at no pains to inform himself as to the condition and the needs of the wool trade.

The organization of the co-operative sale of wool did away with these disadvantages. In the measure of its still limited adoption it has ensured to farmers owning sheep a just price for their produce. It has, in the first place, eliminated the middleman ; either because — as is notably the case in Saskatchewan and Manitoba — the Department of Agriculture undertakes to sell the wool sent to it by producers, or because the responsibility of marketing the wool of members has been assumed by a large association of sheepfarmers. The latter expedient is employed in Alberta, Quebec and Prince Edward Island. Centralization has solved the problem of transport, complete car-loads of wool being made up, and a considerable economy has thus been effected.

But it soon became apparent that for the remunerative marketing of wool there was another necessary condition. Co-operative selling of wool, without preliminary grading of its different classes, is an improvement on individual selling but can be of only limited benefit to sheepfarmers. The Dominion Department of Agriculture made a new forward step possible when it placed expert graders freely at the disposal of the provincial governments who asked for them. Thus a uniform system of grading has been established in various Canadian provinces and has allowed a firm basis to be given to the value of wool.

The scientific grading by experts has further enabled those numerous improvements to be ascertained, which it was necessary to introduce into the methods of shearing and of preserving and packing fleeces in order entirely to obviate their deterioration. Carefully drawn-up rules have been communicated to the farmers as being the *sine qua non* of the sale of their wool by the Department of Agriculture. Short courses of instruction in the rural centres, lectures and practical demonstrations — organized or provided by the Department of Agriculture — have produced a tendency towards the modification of sheepfarming in accordance with the principles of science. Farmers have become aware of the importance of selecting the breed of their sheep with a view to wool production and they attempt to remedy the defects of their wool. Thus the flocks of Canada increase while their intrinsic value is augmented.

Such are the general results of government intervention in favour of the co-operative sale and the grading of Canadian wool.

Altogether, according to the official Preliminary Report of Wool Grading Operations in 1916, the government experts, who have worked in all the provinces of Canada, have graded 140,178 fleeces, weighing 1,004,512 lbs. and produced on the farms.

The importance of this form of co-operation, now in course of development, cannot be too much emphasized, especially at the present time. Facts concerning it are instructive because it is fitted both considerably to increase the production of wool and to improve its quality ; and might well be adopted in many countries and contribute to augmenting their wealth in sheep.

We will now give details as to this enterprise in the Canadian provinces in which it has become important

§ 2. DATA AS TO THE GRADING AND SALE OF WOOL IN SEVERAL CANADIAN PROVINCES.

Province of Alberta. — The Alberta Sheep Breeders' Association has held three co-operative wool sales. Their inauguration and success were made possible by the help given by the provincial government towards organizing and maintaining the association, and by the action of the Dominion Live Stock Commissioner's branch of the Dominion Department of Agriculture in placing at the disposal of the association, without charge, experts who graded the wool. The manner in which these services have been rendered has established a confidence between the association and the buyers which would have been difficult to secure without the official grading by the government officials.

As regards profits some farmers who sold through the association received in 1915 as much as 32 cents (1) for a pound of wool, while their neighbours sold wool of equal quality privately for 18 cents a pound.

The association charges no commission on sales, but assesses the members for the cost according to the quantity each remits. The cost of handling the wool was in 1916 one cent a pound. This included the wages of the staff while the wool was being sorted, weighed and loaded on cars, insurance, printing, general office expenses, and the cost of bags and twine.

The association issues a tabulated statement showing the quantity of wool of each grade sold and the prices received by individuals. Members can thus see how their wool compares with that of their neighbours; and a number of them become anxious to know how they can improve the quality of their wool and so increase their profits. These tabulated statements have moreover helped to establish wool values: individual buyers who still travel from farm to farm are now compelled to offer much better prices to farmers than they would have done before the inauguration of the association's sales.

The following figures show the improvement in the quality of the wool sold by the association from 1914 to 1915:

(1) 1 cent = about $\frac{1}{2}$ d at par.

Years	No. of Sellers	No. of Fleeces	Carloads	Value	Average price per lb.
1914	21	2,500	$\frac{3}{4}$	\$ 3,192.19 ⁽¹⁾	19.00 cents
1915	88	14,500	5	26,837.61	27.77 "
1916	335	42,489	13	83,867.00	29.09 "

(1) \$ = 4.73s at par.

The following facts show the details as to the prices received per pound of wool by quality :

Fine combing	28 $\frac{1}{2}$ cents
" clothing	18 $\frac{1}{2}$ "
" medium combing, firsts	33 $\frac{1}{2}$ "
" " clothing, "	27 $\frac{1}{2}$ "
" " combing, seconds	29 "
" " clothing, "	27 $\frac{1}{2}$ "
" " combing, firsts	35 "
" " clothing, "	28 $\frac{1}{2}$ "
" " combing, seconds	31 "
" " clothing "	28 $\frac{1}{2}$ "
Low " combing	30 $\frac{1}{2}$ "
" " clothing	30 $\frac{1}{2}$ "
Coarse	30 "
Lustre	30 "
Rejects	27 "
Gray and black	26 "
Locks and pieces	22 "
Tags	12 "
Dead wool	15 "

Province of Saskatchewan. — Saskatchewan is generally recognized to be the great grain-growing province of the dominion, but she has given considerable attention to sheepfarming. There are now upwards of 1,500 flocks in the province, varying in size from the small farm flock to the ranch of ten thousand head. Statistics compiled by the Provincial Department of Agriculture show that there are 192,000 sheep in the province.

Three years ago it was quite a problem to market the wool of these flocks. The sheepfarmers are scattered all over the province; the only markets are in East Canada and the United States; few neighbourhoods produce as much as a carload of wool. The wool therefore was sent long

distances and high freights were paid. Many of the owners, who came from practically all parts of the civilized world, had little experience in sheepfarming. Breeds were various and grading unknown: the poorest wool often sold as well as the best and naturally high prices were not paid. In the autumn of 1913 an enquiry was made by the then newly created Co-operative Organization Branch of the Provincial Department of Agriculture. The fact was revealed that the wool clipped that year had been sold at from 8 to 13 cents a pound, 10 cents being about the average price. The department thereupon decided that it was necessary to introduce a new system of marketing which would ensure economical management and the grading of prices according to quality.

A list of the sheepfarmers in the province was at once compiled and early in March 1914 a letter was sent to each, announcing that the Co-operative Organization Branch was prepared to act without charge as marketing agency for the sheepfarmers who would prepare their wool according to its directions. The practice of tying fleeces with binder twine and other sisal cord, and despatching them in coarse jute sacks was one of the chief causes of the low prices received. The sisal fibres, which became mixed with the wool, would not take the dye as the wool did, and the result was the manufacture of inferior cloth. The branch, to overcome this difficulty, undertook to supply to those who would use its marketing facilities paper fleece twine and closely woven jute sacks at cost price.

The following are the instructions sent to persons who intimated that they would market their wool through the branch:

" 1. Roll and tie the fleeces carefully:

- " a) Removing all manure or paint-clotted locks,
- " b) Rolling the fleece with the fresh side out,
- " c) Tying each fleece by itself with paper fleece twine.

" 2. Pack the fleeces in the sacks supplied being careful to

" a) Include only dry wool in your consignment.
" b) Pack the fleeces from the ewes, wethers and bucks, respectively, in separate sacks as far as possible. When it is necessary to pack two or three kinds of fleeces in one sack place sheets of strong paper between the different kinds.

" c) If two or more breeds of sheep are kept pack the wool from each breed by itself, or when necessary pack in the one sack and separate with paper as above described.

" d) If you wish to forward the *tags* (manure or paint-clotted locks clipped from the fleeces) or black or brown fleeces, always place them in sacks by themselves.

" e) Pack the wool tightly into the sacks. A 40-inch by 90-inch sack should hold at least thirty fleeces.

" 3. Prepare for market by:

" a) Filling out two shipping labels for each sack, being careful to give name and address of shipper, name of breed from which wool is taken, also number, kind and net weight of fleeces.

" b) Placing one inside the sack and sewing the sack up, using strong, hard twine.

" c) Sewing the second shipping label securely to the side, not to the end of the sack.

" 4. Storing.

" a) Store the sacks where they will be kept dry until ready to ship.

" 5. Shipping."

" a) Forward the wool by freight, via the most direct route, to the Co-operative Organization Branch, Department of Agriculture, Regina, making the shipment between June 19 and July 1. No shipment should be forwarded later than July 1.

" b) Either prepay the freight to Regina or forward the shipment freight, charges collect, and the Department will pay the freight and deduct the amount from your cheque before making the final settlement.

" c) As soon as the shipment is made, forward the bill of lading at once by mail to the Co-operative Organization Branch."

In 1914, 180 sheepfarmers prepared and forwarded their wool according to these directions. Their total consignment, amounting to 69,404 pounds, was assembled in Regina and sold at a flat price of 17 $\frac{3}{4}$ cents a pound. This, after local freight from the producers' stations to Regina and the cost of twine, sacks, storage, handling etc. had been paid, brought the producers an average price of 16 $\frac{1}{2}$ cents a pound. In 1915 the work was carried on in practically the same way, and 306 sheepfarmers marketed altogether 148,339 pounds of wool through the branch, obtaining a flat price of 25 cents a pound.

In 1916 the Dominion Live Stock Branch undertook by arrangement to provide expert graders to classify the wool, and the same instructions were issued to producers as formerly. Four hundred and eighty-seven owners of flocks marketed through the branch their wool (176,601 pounds) which was sold by tender. The following figures summarize the total weight of each grade handled and the price realized for it.

	Grade	Pounds	Price per pound
Fine combing.		6,623	33 cents
" clothing		10,896	29 "
" medium	combing, firsts.	11,883	36 "
" "	clothing, "	3,631	34 "
" "	combing, seconds.	21,093	34 "
" "	clothing, "	8,080	32 "
" "	combing, firsts	21,288	37 "
" "	clothing, "	1,767	34 "
" "	combing, seconds.	33,160	34 "
" "	clothing "	4,088	31 "
Low "	combing.	15,415	34 "
Coarse		3,574	32 "
Lustre		10,344	31 "
Rejects		14,160	24 "
Gray and black.		1,519	28 "
Locks and pieces		914	24 "
Tags		2,758	11 "
Range		5,363	31 "
Mohair.		145	20 "

Under the grading system the cost of handling the wool was considerably higher, being practically one cent a pound, but this was to be expected as it was necessary to unpack all the wool, grade each fleece and then repack it. It is however quite evident that the price obtained by grading more than compensates for the extra expense.

Province of Manitoba. — Manitoba farmers have long since recognized the value of the co-operative principle, and it is not surprising to find the flockmasters adopting the co-operative grading system as a solution of their wool-marketing problem.

Western wools are sold unwashed. When the buyer estimates the value per pound he estimates also the shrinkage, and then appraises the wool by comparison with scoured wool of like quality in the eastern market.

All sheep owners in the province were supplied early in April 1916 with a circular setting forth in detail the conditions of the wool-marketing scheme. As in Saskatchewan all wool was ordered to be despatched to the Department of Agriculture in June, but this year June was so wet that much of it was not sent until the middle of July. The directions for packing were identical with those issued in Saskatchewan. Freight was prepaid in the majority of cases.

The Dominion Department of Agriculture supplied an expert to do the grading, a record of which was kept on especial forms known as Domestic Wool Grading Sheets. When the wool reached the warehouse it was weighed in the presence of the official grader and a representative of the Provincial Department of Agriculture. The consigner was then notified and an advance payment of 20 cents a pound made, the balance being paid

after the wool had been sold and fully paid for. The wool was immediately graded and packed in wool sacks. On each sack the weight, grade and Dominion mark were stencilled by the grader.

The wool was open to inspection at all times ; and large buyers all over the American continent were notified of the amount for sale, its average quality, and the date at which tenders would be received. Bids were received by closed tenders and the wool sold to the highest bidder. The sale was made on the bases of the grades, as classified by the Dominion representative, acting in this respect for both seller and buyer. The wool was sold for cash, 5 per cent. being paid by the purchaser at the time of sale and the balance when it was despatched.

The expenses for printing, advertising, postage, drays, labour, insurance and freight were estimated after the sale had been completed, and deducted from the price received.

In 1916 nearly 160,000 pounds of wool were sold, of which 154,000 pounds were officially graded. The ungraded wool was sold locally for the best price available. The following figures give the number of pounds of the different grades of wool sold and the prices received for them.

Grade	Pounds	Price per Pound
Fine clothing	2,859	30 cents
" medium combing	6,726	33 "
" " clothing	6,581	30 "
" " combing	57,230	34 "
" " clothing	11,642	30 "
Low " combing	37,400	34 "
Coarse	1,639	32 "
Lustre	15,542	30 "
Gray and black	3,111	22 "
Rejects	2,044	24 "
Seedy and dead	2,471	22 "
Locks and pieces	2,989	22 "
Tags	1,280	10 1/2 "
Mohair	120	28 "

Owing to the war there is an abnormal demand for coarser or combing wools, the clothing wools being somewhat less in demand and used chiefly for making finer materials and broadcloth.

One of the outstanding features of the whole scheme is the number of small sheep owners who benefit by it. More than half the wool of all the

flockmasters of Manitoba — estimated at over a thousand — was marketed through it in 1916. Careful breeding, attention to the health of the flock, and care and cleanliness in handling the wool, might increase the price paid for Manitoba wool by fully 5 cents a pound.

Prince Edward Island. — The co-operative grading and selling of wool was attempted for the first time in Prince Edward Island in 1915. Fifty farmers delivered 5,500 pounds of wool which were very satisfactorily sold. The work was in this year undertaken rather late, but after the harvest there were constituted in the west of the island societies for the co-operative sale of wool and lambs and for community breeding. In other parts of the island the farmers' institutes and the breeding associations became busy over the same problem. Efforts are being made to combine all local societies under the Sheep Breeders' Association, thus placing all the work on the producers. During the winter a representative of the Federal Live Stock Branch gave a number of demonstrations on boxing fleeces, and pointed out how wool might be increased in value by proper care during the winter. This department agreed to do the grading in 1916 as in the previous year, and stations for receiving the wool were opened at Summerside and Charlottetown.

The chief obstacle to progress seems to be the time farmers have to wait for payment, for they used to sell the wool directly to merchants for cash. One of the bankers has however agreed to help the associations.

In 1916, 369 farmers took advantage of the organization. Altogether 28,302 pounds of wool or 4,411 fleeces were sold, for a total price of \$ 10,949.47. The prices of the different grades varied from 43 cents a pound for medium clothing to 10 cents a pound for tags.

Province of Quebec. — The Wool Growers' and Sheep Breeders' Associations in Quebec have again successfully graded and marketed their wool. In order to facilitate the work and improve the quality of the product instructors have gone through the province and explained to the farmers the rules they must follow in preparing their wool for sale, shearing etc. :

Six hundred and forty-seven new members have been added since 1915 to the associations ; a new association has been formed in Megantic county, and the total output of wool was 169,839 pounds in 1916, showing an increase of 65,647 pounds as compared with 1915. The wool was sold in 1916 for \$ 71,092.70. Medium and fine medium combing grades sold at 43 cents a pound, black and gray and rejects at 38 cents. The average price for all grades, including rejects, was 41.8 cents a pound. These prices were all F. O. B. at the despatching points. Since local prices for ungraded wool ranged from 31 to 35 cents a pound, a gain of 7 to 12 cents a pound, or 40 per cent., had been secured.

The associations are on a purely co-operative basis. The membership fees are based on the amount of business which each member does with the association. Four cents a fleece has been found to be sufficient to cover all expenses.

The results obtained have been an improvement in the quality of the wool and in its preparation for sale, and its marketing at higher prices.

The following figures show the production of single associations.

Association	Number of Pounds Produced
Pontiac	51,564 ½
Compton	24,471 ½
Richmond	17,567
Sherbrooke	16,885
District of Bedford	16,621 ½
Stanstead	14,252
District of Beauharnois	13,350 ½
Argenteuil	11,191
Megantic	3,937
Total	169,840

As regards the proportion in which the different grades were produced it is enough to state that medium combings account for 49.4 per cent. and low medium combings for 34.5 per cent. of the total quantity.

The following are further data as to the associations and their production and sale.

Association	Number of Members	Number of Fleeces	Average Weight per Fleece	Average Price per Fleece	Average Price per Pound
			Pounds		
Pontiac	488	7,216	7.02	\$ 3.04	42.8 cents
Compton	282	3,489	7.06	3.00	42.4 "
Richmond	167	2,364	7.43	3.10	41.7 "
Sherbrooke	133	2,238	7.53	3.19	42.3 "
District of Bedford	153	2,226	7.42	3.08	41.5 "
Stanstead	125	1,965	7.22	3.06	42.3 "
District of Beauharnois	113	1,545	8.79	3.62	41.1 "
Argenteuil	107	1,481	7.75	3.10	40.0 "
Megantic	49	486	8.1	3.45	42.5 "
	1,617	23,010	7.59	3.18	41.8

Nova Scotia. — The co-operative selling of wool was undertaken in two counties of Nova Scotia in 1916, in Antigonish and Guysboro. In both the Department of Agriculture has representatives who organize the work. In Guysboro merely a beginning was made, the total sale amounting to a little less than 2,000 pounds. In Antigonish it was the second year in which wool was sold co-operatively, and about 15,400 pounds were graded and sold. The average price received was 41 $\frac{1}{8}$ cents a pound. The expenses amounted to slightly more than half a cent a pound.

REGENCY OF TUNIS.

NATIVE THRIFT SOCIETIES IN 1915.

OFFICIAL SOURCE :

DIRECTION GÉNÉRALE DES FINANCES: *Compte rendu des opérations des sociétés indigènes de prévoyance en 1915.* (Financial Statement as to the Work of the Native Thrift Societies in 1915). Tunis, 1916.

The native thrift societies, to which all native agriculturists are obliged to belong, date from 1901. In those days there was question only of an experiment, and in 1905 only fifteen societies were at work. The benefits of the scheme were extended to the whole regency by a decree of 20 May 1907. The first article of this decree states that the Tunisian societies are enterprises of "agricultural mutual aid" — thus presuming for them a large programme of collective activity — and specifies their power to form among their members agricultural co-operative associations. Article 21 lays down that such co-operative societies may enjoy the benefit of special advances from the sums annually due to the Bank of Algeria, exactly as do the planters' co-operative societies.* The thrift societies play, towards the co-operative societies and in respect of these advances, exactly the rôle of the district banks of agricultural credit.

But the Tunisian legislature has aimed especially at organizing credit for natives. The decree states very clearly in the first place that loans are to be made exclusively to members of the thrift societies (articles 3 and 13). These loans are in the form of seeds and of specie : the members can borrow even to extinguish prior debts, if necessary, on the security of mortgages, so that they can at once free themselves from dependence on usurers. Further the decree of 20 May 1907 is concerned with providing the thrift societies with the resources necessary to their credit operations : it deducts from an advance of one million francs (1) made by the Tunisian government to the Bank of Algeria a sum of 50,000 francs as reserved to these societies ; and to this a decree of 26 January 1911 adds the half of the annual dues. From these sums the societies can receive free advances equal

(1) 1 franc = $9 \frac{3}{5}$ d at par.

to half the sum of the centimes additional to taxes which they have collected as assessments. Since these resources may be insufficient, the same decree of 26 January 1911 authorizes the societies to open current credit accounts in quarters approved by the Director of Finances. It also determines the procedure for the realization of long or short term loan operations, whether secured by a mortgage or not.

The relief given by Tunisian thrift societies should be noted. It is limited in its scope and may not be granted directly. Article 10 states that in the case of a famine the societies may make advances, which are repayable, to the necessitous; and that it will subsequently be the part of the government to remit to the borrowers, at the request of the societies, all or part of the advances so made.

The amount of the assessments of centimes additional to the native taxes varies in the different societies from 5 to 7 per cent. of such taxes.

§ 1. RECEIPTS

The receipts of the native thrift societies which have increased their credit were in 1915 as follows:

1) Recoveries on the credit of former societies.	Fr.	1,441.61
2) Additional centimes on <i>mediba</i> tax.		6,746.53
3) Quota of the recoveries of temporary assessments due to the native thrift societies		118,058.60
4) Additional centimes on <i>canoun</i> tax on olive and date trees:		
Years prior to 1910	314.13	72,665.21
Years 1910 and later	72,351.08	
5) Additional centimes on <i>achour</i> tax:		
Years prior to 1910	748.37	88,440.42
" 1910 and later.	87,692.05	
6) Additional centimes on <i>djerba</i> tax		9,328.42
7) " " " <i>mradjas</i> "		2,561.21
8) Recovery of costs of management and commissions:		
a) for loans of seeds.	2,806.58	56,951.54
b) for mortgage loans	53,362.67	
c) for advances to affiliated societies.	782.29	

Total . . . Fr. 356,193.54

Independently of these receipts the societies recovered 3,765,887.52 francs in 1915 of the amount of their loans, such sum being distributed as follow:

1) Loans of seeds 1908-1909	Fr.	3,950.32
2) " " 1909-1910		4,308.48
3) " " 1910-1911		21,107.24
4) " " 1911-1912		7,450.10
5) " " 1912-1913		137,005.94
6) " " 1913-1914		228,949.56
7) " " 1914-1915		3,230,430.11
8) " maintenance 1912-1913		53.00
9) " " 1913-1914		36,986.00
10) " " 1914-1915		131,020.00
11) Mortgage loans		43,970.04
12) Advances to affiliated societies		51,676.73

Total . . . Fr. 3,896,907.67

Carried forward from receipts increasing credit of societies 356,193.54

Total sum of receipts in 1915 Fr. 4,253,101.21

§ 2. CREDIT ACCOUNT OF THE SOCIETIES ON 31 DECEMBER 1915.

Since no expenditure in 1915 had diminished the amount of the receipts increasing the credit of the societies these amounted to the net sum

of Fr. 356,193.54

Add to this the amount of the societies' credit when the books of the previous year were closed 4,595,721.89

The total credit of native thrift societies on 31 December 1915 was therefore Fr. 4,951,915.43

This sum was distributed as follows :

1) In hand in specie	Fr. 1,514,073.48
2) Loans of seeds in 1908-1909 still to be recovered	49,709.37
3) " " " 1909-1910 " " "	28,190.53
4) " " " 1910-1911 " " "	94,578.75
5) " " " 1911-1912 " " "	980.16
6) " " " 1912-1913 " " "	466,176.01
7) " " " 1913-1914 " " "	199,333.54
8) " " " 1914-1915 " " "	3,280,695.68
9) " maintenance in 1912-13	58,173.98
10) " " " 1913-1914	30,003.70
11) " " " 1914-1915	4,086,450.64
12) Mortgage loans	1,577,232.70
13) Sums advanced to affiliated societies	31,666.16
14) Sums spent before 31 December 1915 on loans of seeds in 1915-16, not yet distributed among the borrowing societies.	916,313.88
<hr/>	
Total . . . Fr.	12,333,578.58

From this must be deducted :

1) Sum due to the Revictualling Account (1) and advanced for the loans of seeds in 1914- 1915	Fr. 3,295,212.51	}	7,381,663.15
2) Sum due to the State and advanced for the loans of maintenance in 1914-1915. .	Fr. 4,086,450.64		
<hr/>			
Remainder . . .	Fr. 4,951,915.43	<hr/>	

(1) See the article on the "Revictualling Account" in our issue of June 1916, page 113.

§ 3. GENERAL OBSERVATIONS ON THE WORK OF THE SOCIETIES IN 1915.

1) *Receipts.* — The results obtained by the native thrift societies in the matter of receipts during 1915 may be considered satisfactory, for it should be remembered that the harvest in certain districts left much to be desired owing to drought and hail, and that the state of war has caused special conditions. The net amount of the credit of the societies was 4,951,915.43 francs on 31 December 1915, and this sum has since been surpassed.

This capital surpasses that anticipated at the foundation of the societies, namely four million francs; but it was nevertheless inadequate to the needs of the season 1914-1915, during which the societies were obliged to accept State aid in order to ensure the loans of seeds and maintenance to the natives, which loans constitute their first and their chief object.

It must however be anticipated that the societies will soon, in addition to their present provision of necessary credit to various enterprises of mutual aid, be called upon to help other organizations; which will doubtless arise from a need for economic expansion subsequent to the war.

The societies should therefore continue to observe the principles of economy and prudence which they have followed hitherto. In constituting reserve funds for future needs they give a salutary example in thrift to their members. In order not to compromise the success of their enterprise they are careful always to be sure that their advances will be repaid.

2) *Loans of Seeds and of Maintenance.* — In the farming year 1914-1915 the loans of seeds represented the sum of 6,511,125.79 francs, those of maintenance 4,217,470.79 francs. The prices were by quintal (1) 34.50 francs for wheat, 24.40 francs for barley, 34 francs for beans and 23.91 francs for maize. These prices should be considered satisfactory for they include the price of sacks and all costs of management, transport, storage, guarding etc.

The loans of seeds were represented in early years by the following sums :

Season 1907-08	25,628.70
— 1908-09	1,750,360.39
— 1909-10	670,563.42
— 1910-11	1,737,523.49
— 1911-12	55,620.80
— 1912-13	1,786,550.37
— 1913-14	451,175.82

The loans of maintenance amounted to :

in 1908-09	381,960.81
in 1910-11	118,465.72
in 1912-13	58,435.48
and in 1913-14	83,459.75

(1) 1 quintal = 220 lbs.

Although the cereal harvest in 1915 was in general good, certain districts which had suffered from drought or hail applied for loans which were granted to them. A total expenditure of 1,566,749 francs — the price of 32,899 quintals of wheat and 24,297 quintals of barley — was thus incurred.

In distributing this grain the administrators aimed especially at buying cereals in the districts in which they were to be distributed, a procedure which had the double advantage of furnishing borrowers with seeds suited to their local climatic conditions and of considerably reducing the costs and difficulties of transport. Unfortunately it could rarely be applied, for there is usually a lack of cereals in the districts in need of loans.

3) *Mortgage Loans.* — The native thrift societies have continued, in view of the continuation of the state of war, to abstain on principle from lending on mortgages. In the exceptional case however of five requests for loans, made by the natives of Nefzaoua before the war, the total sum of 38,789.95 francs was lent in 1915.

During the year 1914-1915 "small mortgage loans of maintenance" were instituted in the caidate of Sousse in order to allow small proprietors to obtain food without recourse to usury. In the period from 5 February 1915 to 14 August 1916 forty-two such loans were made of sums between twenty and 500 francs, totalling 2,310 francs.

4) *Co-operative Associations.* — In spite of great difficulties, due especially to an insufficient staff and the obstacles placed by the war in the way of providing industry with primary and other material, most of the co-operative societies affiliated to the native thrift societies have developed their activity in 1915.

Independently of the immediate aid they have been able to give their members by placing at their disposal the capital they need, charging far less than the usual rate of interest. these organizations have accustomed the native artisans and traders to co-operation, that indispensable condition of industrial and commercial progress.

The advances they made amounted to 41,185.29 francs in 1913 and to 23,790 francs in 1914, and rose in 1915 to 115,987.49 francs. This sum does not include the numerous advances made by the Revictualling Account to various native enterprises, and especially to the Laboratory of Industrial and Commercial Experiments in order to allow this institution to ensure the activity of its various workshops and furnish important military supplies to the *Intendance*.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH INDIA.

1. CO-OPERATION IN TRAVANCORE (1).

The State of Travancore in Southern India adjoins the province of Madras and has an area of 7091 square miles. In 1901 the population was 2,952,157, having increased by 15 per cent. in the foregoing decade. Travancore ranks fourth among native Indian States as regards area and third as regards population.

Provision for co-operation in Travancore is contained in a regulation of 4 April 1914, and in the rules under Section 42 of this regulation which were issued on 17 November 1915.

On 8 July 1916 twenty-three co-operative societies had been registered, one of them being a bank which included among its members not only individuals but also societies, and had for its object the financing of the latter. Of the remaining twenty-two societies two were for production and distribution, one for production only and two for distribution only, while the other seventeen were credit societies all of which except one were formed on the Raffeisen model and on the basis of unlimited liability. Since all these societies had been registered towards the end of the official year, which begins in the middle of August, only a few had actually started work. The bank, the producing and distributing society, one of the societies for distribution only and seven of the credit societies were however in full working order although they had not yet accomplished much.

All but one of the credit societies are intended to help agriculturists, who seem, by all the evidence yet available, to take advantage of them.

By Section 4 of the regulation of 4 April 1914 "the liability of a society, of which a registered society is a member, shall be limited; the liability of a society, of which the object is the creation of funds to be lent to its members, and of which no member is a registered society, shall be

(1) The facts regarding co-operation in Travancore have been communicated to us by Mr. C. Govinda Pillai, Registrar of Co-operative Societies in this State.

unlimited. Where the liability of the members of a society is limited by shares, no member, other than a registered society, shall hold more than such portion of the share capital of the society as may be prescribed by the rules, subject to a maximum of one fifth; or have a claim or interest in the shares of the society exceeding one thousand rupees (1) ”.

The minimum membership of a society, which includes no registered society among its members, is seven.

Where the liability of the members of a registered society is not limited by shares, each member has one vote only. In the contrary case he has as many votes as are prescribed by the by-laws.

Subject to any prior claim of the government in respect of land revenue or any money recoverable as land revenue, or of a landlord in respect of rent or any money recoverable as rent, a registered society is entitled in priority to other creditors, to enforce any outstanding demand for anything due to it from a member or past member : a) in respect of the supply of seed or manure or of the loan of money for the purchase of seed or manure, upon the crops or other agricultural produce of such member or person at any time within eighteen months from the date of such supply or loan ; b) in respect of the supply of cattle, fodder for cattle, agricultural or industrial implements or machinery, or raw materials for manufacture, or of the loan of money for the purchase of any of the foregoing things, upon any such things so supplied, or purchased in whole or in part from such loan, or any articles manufactured from raw materials so supplied or purchased, at any time within three years from the date of such supply or loan.

The liability of a past member for the debts of a registered society, as they existed at the time when he ceased to be a member, continues for a period of two years from the date of his ceasing to be a member.

The estate of a deceased member is liable, for a period of one year from the time of his decease, for the debts of a registered society as they existed at the time of his decease.

The government may remit any stamp duty with which instruments executed by or on behalf of a registered society may at any time be chargeable, as well as any fee payable under any law of registration.

The *Trivandrum Central Co-operative Bank, Limited*, to which we have already alluded, aims at developing co-operative societies in Travancore ; financing them and carrying on banking business with them ; controlling them when they have been affiliated to itself by careful and regular inspection ; and encouraging thrift, self-help, and mutual trust and confidence among its individual members.

The capital of the bank is 100,000 rupees, made up of 1,000 shares of 100 rupees each. Not more than 500 shares may be allotted to members other than societies ; and no member may at any time hold more than ten shares. No member may withdraw or transfer a share which he has not

(1) 1 rupee = 15. 4d.

held for at least one year. Every transfer of a share must have the sanction of the Board of Management and involves payment of a fee of 2 rupees. The value of each share is payable in five instalments of 20 rupees each, the instalments being paid at intervals of at least three months.

The funds of the society must be utilized primarily for the granting of loans to registered co-operative societies. Loans may also be granted to members 1) on the security of their deposits or on their paid-up share capital, not exceeding 90 per cent. ; 2) on the security of Government of India promissory notes ; 3) on the personal security of the borrower and two sureties from among the members.

No loan to an individual member shall be granted in the first instance for more than three months, nor to a society member for more than two years ; but the Board of Management may from time to time grant extension of loans, no extension exceeding the original period. The rate of interest charged on loans shall not exceed $9\frac{1}{2}$ per cent. per annum and a rebate of 2 per cent. per annum shall be allowed on all punctual repayments.

One fourth of the net profits of each year shall be carried to the credit of the reserve fund. One eighth shall be paid as honorarium to the secretary. Of the balance 10 per cent. shall be set apart to meet the charges of inspection, the remainder being divided among all the members, subject to a maximum of 12 per cent. per annum, according to the paid-up share capital held by them during the year. The reserve fund shall be one and indivisible : it shall not be drawn upon except to make losses good, and shall be invested as the registrar directs.

This bank has now 85 members, namely 69 individual members and 16 society members — including 15 associations of agricultural credit. Hitherto its loans on personal guarantees have been negligible but it has lent to its society-members 27,560 rupees of which sum 27,310 rupees have not yet been repaid. Its paid-up share capital amounts to 8,340 rupees and its loans to the government to 29,800 rupees.

The Trivandrum Co-operative Distributive Society, Limited, is a society of a different type. It has a capital of 5,000 rupees consisting of 1,000 shares of 5 rupees each. There is an entrance fees of six annas (1) a share. No member may hold in the first instance more than twenty shares ; but members may use the dividends earned by them in the purchase of additional shares until they hold altogether a maximum of twenty-five.

Profits must be disposed of as follows : one fourth shall be carried to the credit of the reserve fund ; a bonus, not exceeding 10 per cent. of the net profit or a maximum of 250 rupees a year, shall be paid to the secretary ; out of the remaining profits a dividend not exceeding $7\frac{1}{2}$ per cent. a year shall be paid on the paid-up share capital ; any balance shall be paid to the members as a bonus, proportionately to the purchases made by them.

The following table shows the activity of agricultural co-operative societies in Travancore in the year which ended on 15 August 1916.

(1) 1 anna = 1 penny.

Activity of Agricultural Co-operative Societies in Travancore.

Kind of Society	Number of Societies	Number of Individual Members	Amount of Loans on Personal Guarantees	Value of Products sold to Members	Purchase of Members Products	Loans not repaid	Paid up Share-Capital	Costs of Administration
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Unlimited Liability Societies	17	551	27,577	—	—	27,210	1,320	421
Limited Liability Societies	1	27	610	4,276	4,090	610	1,350	384
Total . . .	18	578	28,187	4,276	4,090	27,820	2,670	805

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2. THE MADRAS PROVINCIAL CO-OPERATIVE BANK LIMITED. — M. R. Ry. M. Shiva Rao Avl. of Puttur, S. Canara, in *The Madras Bulletin of Co-operation*, Vol. VIII., No. 1, September 1916.

The Imperial Committee on Co-operation, whose report we resumed on another occasion (1), suggested "the creation in every province of a provincial or apex bank", which should deal eventually with central banks only and be directed by a board of management, but in which the ultimate control should be vested in the federated societies. The committee was of opinion that the Madras Central Urban Bank, Limited, could be converted, provided certain essential changes were carried out, into a Provincial Bank, such as the committee contemplated. This proposal was not however favourably received by the co-operators of the presidency, on whom therefore it has become incumbent to form a Provincial Bank. It is proposed to associate for this purpose all the co-operative societies in the presidency in a central union, and the draft by-laws for the scheme have been approved by the Registrar of Madras Co-operative Societies and the Commissioner of Revenue Settlement.

The capital necessary to the undertaking is estimated at 200,000 rupees, to form which each of the 2,000 societies in the presidency must take on an average a single share of 100 rupees. It is proposed to spread the payments on account of shares over ten years, to treat half the amount

(1) See *International Review of Agricultural Economics*. January and March 1916.

of each share as reserve liability in the case of agricultural credit societies and supervising unions, and to require an entrance fee of one rupee, so that any society wishing to take a share may remit 6 rupees — or 11 rupees if it be a non-agricultural society — to its own Central Bank. One thousand additional shares will be offered to individual capitalists, on condition that in their case one tenth of the value of each share be paid with the application and the rest on allotment, and with the further reservation that shares will be allotted to individuals only after at least an equivalent number of shares have been taken up by the societies. This provision will secure a majority of votes to the societies.

It is hoped that if the Provincial Bank attain to a *working* capital of 1,000,000 rupees it will be able to lend to Central Banks at a rate not exceeding $6\frac{3}{4}$ per cent.

Deposits will be received by the Provincial Bank at rates not exceeding the lowest now offered by Central Banks, namely 6 per cent. for long term deposits and $5\frac{1}{2}$ per cent. and 5 per cent. for short terms.

It is proposed that all the overdrafts now granted by the Bank of Madras to Central Banks be transferred to the Provincial Bank, the latter granting in its turn an equivalent overdraft to each affiliated Central Bank and charging either the same rate of interest as that now allowed by the Bank of Madras or one quarter per cent. more.

Deposits received by Central Banks may be transferred, if there be no outlet for their expenditure in such banks, to the Provincial Bank which will protect the receiving bank from loss by paying the regular rate of interest on them.

If the bank rely mainly on society shareholders for its share capital, it will not be necessary to declare a higher dividend than 6 per cent.

The board of management of the Provincial Bank will consist of representatives of individual shareholders, of Central Banks and of primary societies, the two latter groups forming a majority. The board will elect a standing committee of at least three members, who will, together with the secretary, direct the business of the bank according to standing orders issued by the board. The latter will probably meet once in three months.

* * *

3. CO-OPERATIVE DISTRIBUTION IN NORTHERN INDIA. — Mr. A. C. Chatterjee in *Indian Journal of Economics*, April 1916, quoted in *The Madras Bulletin of Co-operation*, Vol. VIII. No. 1, September 1916.

Co-operative Seed Supply. — In the villages of Northern India the rural lender lends seed grain as well as money and to a large extent. Unfortunately the cultivator has, when he borrows the grain at sowing time, absolutely no choice with regard to the quality of the seed that he gets. After a famine the lenders often refuse to advance it except at prohibitive

prices ; and generally they take advantage of every possible circumstance to exploit the cultivators as much as they can.

Under the alternative and co-operative system a credit society or a central bank obtains a supply of approved seed through the Agricultural Department. It is sold at market rates or at something above cost price to selected members living within a convenient distance of the centre of distribution. Only persons known to be good and careful husbandmen are supplied and the cultivation is supervised by trained officials of the Agricultural Department. When the crop has been harvested the seed is cleaned and graded, and when it has been passed by experts it is bought back by the bank or society at a slight premium over market rates. Adequate arrangements are made for storage in specially constructed godowns. In the following season a limited quantity of the stored seed is sold to selected members while the bulk is disposed of at market rates to the general body of members. The distributing agency stipulates that it may buy back the produce of selected cultivators if this prove to be of sufficiently good quality. The general body of members may dispose of their produce in the open market. All transactions are in cash, and a member without enough ready money to buy must borrow from a credit society.

This system has had satisfactory results in freeing the cultivators from bondage to the usurers and in notably improving the quality of crops.

Co-operative Water Supply. -- The Agricultural Department is bearing the initial cost of an experiment in establishing a co-operative water supply, namely of pumping water in Sultanpur District from the Gumti to irrigate the fields of members of two or three adjacent credit societies. The cost will eventually be repaid in instalments by the societies, who will levy a rate from each member proportionate to the area irrigated.

If the experiment prove successful, as it promises to do, there is every prospect of organizing water supply societies in suitable tracts to pump water from rivers, streams and large, shallow lakes and supply it to agriculturists, whether or not they belong to credit societies, although if all of them belong to such the collection of dues will of course be simplified. There might be like organizations to allow pumping installations to be attached to wells having large supplies of water, especially tube-wells, in tracts where they can be sunk with advantage. It is not very often possible for individual agriculturists to undertake the cost of a pumping installation, but a number of them might combine to do so.

FRANCE.

A NEW SYNDICATE FOR MECHANICAL AGRICULTURE. — *Journal d'agriculture pratique*, Paris, 11 January 1917.

A certain number of agriculturists in the *arrondissement* of Pontoise have formed themselves into a trade syndicate in order to acquire traction

engines and to undertake without delay ploughing and other agricultural operations which have for the present been suspended.

The capital has been subscribed by the members in proportion to the number of hectares (1) of arable land they hold and has allowed the purchase of the following machines :

18 Emerson	20 horse power traction engines
6 Arion	40 " " " "
2 Avery	35 " " " "
2 " "	16 " " " "
3 Avance	20 " " " "
1 Bull	16 " " " "

that is 32 traction engines at a total cost of about 500,000 francs (2).

The activity of the syndicate will affect twenty-two communes, and about 7,200 hectares of arable land fitted for the intensive culture of corn and sugar beetroot. The scarcity of agricultural labour in this district — as a result of the mobilization of Belgian workmen, the proximity of factories of war material and the prohibition to employ prisoners of war which was long in force — decided the agriculturists to use these new methods of work as a matter of urgency.

Counting the traction engines already bought by individuals outside the syndicate, there are now forty of these machines in the *arrondissement* of Pontoise, and the possibility of shortly using double that number ought to be realized.

UNITED STATES.

THE DEVELOPMENT OF THE CO-OPERATIVE ASSOCIATIONS CONTROLLING DAIRY PRODUCTION IN THE UNITED STATES FROM 1906 TO 1916 — *Hoard's Dairyman*, Fort Atkinson, 3 November 1916.

The movement in favour of co-operative societies of breeders and producers in order to inspect the individual production of milch cows, for the purpose of selection, began in Michigan in 1906 and has in ten years spread through thirty-eight States. To-day there are 346 of these associations.

(1) 1 hectare = 2.47 acres.

(2) 1.2611 francs = 1s at par.

They are most numerous in the following States :

Wisconsin	52	Pennsylvania	19
New York.	47	Oregon	15
Vermont	38	Illinois	12
Iowa	23	Maine	11
Minnesota	22	New Hampshire . .	11
Ohio.	20	Michigan.	10

The following table shows the complete development of these associations since they were founded.

Development of the Co-operative Associations inspecting the Production of Milch Cows in the United States from 1 July 1906 to 1 July 1915.

States	Number of associations active in										
	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916
Michigan	1	4	2	5	4	3	4	4	3	3	10
Maine	—	—	3	4	3	6	5	4	5	8	11
New York	—	—	1	1	3	9	18	21	29	35	47
Vermont	—	—	—	2	8	10	11	17	28	33	38
Iowa	—	—	—	2	5	4	8	7	8	13	23
California	—	—	—	1	3	2	4	4	5	7	9
Wisconsin	—	—	—	9	10	10	8	11	24	37	52
Nebraska	—	—	—	1	0	0	0	3	2	3	4
Colorado	—	—	—	—	1	1	2	1	1	0	0
Pennsylvania	—	—	—	—	1	1	2	2	7	14	19
Ohio	—	—	—	—	1	0	0	1	4	5	20
Maryland	—	—	—	—	—	1	3	3	2	4	7
Illinois	—	—	—	—	—	4	3	2	7	3	3
Washington	—	—	—	—	1	3	1	0	0	1	12
Minnesota	—	—	—	—	—	3	7	10	9	11	22
New Hampshire	—	—	—	—	—	1	1	1	4	8	11
Oregon	—	—	—	—	—	1	1	1	7	11	15
Utah	—	—	—	—	—	1	0	0	1	1	0
Massachusetts	—	—	—	—	—	2	2	2	3	0	4
Virginia	—	—	—	—	—	2	2	2	0	0	2
Kansas	—	—	—	—	—	—	1	1	1	0	1
Indiana	—	—	—	—	—	—	2	2	2	3	7
Kentucky	—	—	—	—	—	—	1	1	1	0	1
Missouri	—	—	—	—	—	—	—	—	2	1	2
New Jersey	—	—	—	—	—	—	—	—	2	3	4
West Virginia	—	—	—	—	—	—	—	—	1	1	3
Connecticut	—	—	—	—	—	—	—	—	1	3	6
North Carolina	—	—	—	—	—	—	—	—	2	0	0
Louisiana	—	—	—	—	—	—	—	—	1	0	0
South Dakota	—	—	—	—	—	—	—	—	1	1	3
Nevada	—	—	—	—	—	—	—	—	—	1	0
Arizona	—	—	—	—	—	—	—	—	—	—	2
Rhode Island	—	—	—	—	—	—	—	—	—	—	2
Delaware	—	—	—	—	—	—	—	—	—	—	2
Idaho	—	—	—	—	—	—	—	—	—	—	2
Mississippi	—	—	—	—	—	—	—	—	—	—	1
Montana	—	—	—	—	—	—	—	—	—	—	1
Tennessee	—	—	—	—	—	—	—	—	—	—	1
Total	1	4	6	25	40	64	62	100	163	210	346

Part II: Insurance and Thrift

UNITED STATES.

STATE HAIL INSURANCE IN NORTH DAKOTA.

SOURCES :

BIENNIAL REPORT TO THE THIRTEENTH LEGISLATIVE ASSEMBLY OF THE HAIL COMMISSIONER
ON HAIL INSURANCE FOR THE TERM ENDING, December 31st, 1912, Bismarck, N. D.

BIENNIAL REPORT TO THE FOURTEENTH LEGISLATIVE ASSEMBLY OF THE HAIL COMMISSION
ON HAIL INSURANCE FOR THE TERM ENDING DECEMBER 31ST, 1914. Journal Publishing Co., Devil's Lake, N. D.

STATE HAIL INSURANCE LAW, NORTH DAKOTA. W. C. Taylor, Commissioner of Hail Insurance, 1916.

North Dakota has been the first and so far the only State in the Union which has placed a law for the State insurance of crops against loss or damage by hail on its statute books. The venture is therefore highly important as a test of the ability of the State, from a practical standpoint, to compete with privately owned and managed insurance enterprises. We will examine the provisions of the Act and the results as set forth in the two biennial reports so far issued by the Commissioner of Hail Insurance.

§ I. THE ACT.

The State Hail Insurance act of North Dakota first went into operation in January 1911, and after two years' experience was amended in 1913.

The law as it now stands provides for a Hail Insurance Department which shall insure growing grain crops in any county in the State against loss or damage by hail. County, township, city and village assessors, at the

time of listing property for assesment each year, are required to inquire of the party assessed how many acres of crop such party may wish to insure for the year, informing him that as a premium for this insurance a payment of 30 cents for each acre insured must be made. As originally enacted, the law had fixed the rate for insurance premium at 20 cents per acre of grain insured, but the experience of the first two years indicated that this rate was too low, and it was therefore raised to 30 cents, as above.

The assessor is required to fill in the forms for all such insurance agreements, to collect the 30 cents per acre with an additional half cent per acre as an application fee, and to forward these forms and moneys to the county auditor, who files the applications and turns over the moneys to the county treasurer.

The insurance is in force and effect from the time of filing the application in the office of the county auditor until the grain is cut, but in no case later than September 15th of each year.

On the 1st of June, July and August, the county auditors make a list of all hail insurance applications filed with them, and forward same to the Department of Hail Insurance at the State capital, Bismarck.

Meantime, the county commissioners at their April board meeting shall appoint for each county a competent resident to act as official adjuster of losses and damage caused by hail to any crop insured under the act. The State Commissioner of Hail Insurance must be notified by the county auditors of such appointments which only become valid on receiving his approval, and he has power to remove or discharge any such official adjuster for incompetency or neglect.

It is the duty of these official adjusters to adjust losses or damages caused by hail to crops within their districts insured under the act.

When any party thus insured has sustained loss by hail he promptly notifies the Commissioner of Insurance, who directs an official adjuster to visit the place and estimate and adjust such loss. In so doing it is his duty carefully to inquire into the conditions of the crop before the loss occurred, as to whether it was poor, medium, or good, and if he deems it necessary he has power to call witnesses to testify as to the said condition, and he shall make his estimate and adjustment after ascertaining the condition before and after the loss occurred. In estimating the loss the adjuster shall allow as damages the proportion which the crop as damaged bears to the crop if no such loss had occurred. If the total value of the crop insured be less than eight dollars per acre then in case of total loss the insured shall receive the total value thereof; if the loss be partial he shall receive that percentage of value which the loss bears to the total value of the crop insured. If the value of the crop be more than eight dollars per acre, the insured shall receive that percentage of the maximum of eight dollars which the loss bears to the total value of the crop, provided however that in no case shall more than eight dollars per acre be allowed as the maximum for wheat, flax, oats, barley, corn, rye, and other grains.

Should the party insured refuse to accept the adjustment made by the official adjuster he shall have the right to appoint one disinterested

person as adjuster and the official adjuster shall appoint another, and the two shall elect a third, and the three shall then proceed to adjust the loss in the manner above described, the judgement of the majority to be binding upon both parties as the final determination of said loss.

As compensation for their services the official adjusters receive five dollars a day and actual expenses while engaged in the performance of their duties, and all persons called to assist them in adjusting losses shall receive \$2 a day while so engaged.

The Commissioner of Hail Insurance, on receiving from the county auditors the complete returns showing the number of acres insured for the year, shall sum up the total hail insurance fund available for that year; when he shall have received a complete return from all of the hail losses in the State as adjusted and allowed he shall sum up the total of such amounts for that year, and he shall sum up the expenses of his office in accordance with rules prescribed in the Act. The total of such expense account shall first be deducted from the total amount of the hail insurance receipts for that year and paid, and if the balance remaining is sufficient all hail losses shall be paid in full as allowed by the adjusters, but if the expenses and hail losses shall exceed the amount of hail insurance receipts for that year, the expenses shall be paid first and the losses shall be paid pro rata. Should there be a surplus after paying expenses and losses, such surplus shall remain in the State treasury in the hail insurance fund to be drawn upon in future years in which there may be a deficiency.

When the Commissioner of Hail Insurance has figured up the whole year's business as indicated above, he shall prepare and furnish to the State auditor a certified list of the losses arranged by counties, with the names and addresses of persons who have suffered loss and are entitled to compensation, the appraised losses, and the amount to be paid to each person. The State auditor shall then draw warrants for these amounts upon the State treasurer, to be charged to the hail insurance fund, and such warrants shall be mailed forthwith to the persons entitled thereto.

§ 2. THE ACT IN OPERATION.

Hail Commissioner W. C. Galbreath in drawing up the first biennial report dealing with the years 1911-1912 remarks:

«The fact that the State had entered the insurance field subjected the law and its methods to criticism, and its low rate was made the target of ridicule by those who were opposed to the measure. During the year 1911 there were 1,011 policies written and \$ 26,109,144 collected in premiums. When the expenses of conducting the affairs of this company, including books, stationery, salaries and fees for adjustment of losses, which amounted to \$ 3,421,63, leaving a balance of \$ 1,129.33 for future contingencies, were deducted, there was distributed among the policy holders the sum of \$ 21.188,03, or seventy cents on the dollar for the losses sustained ».

The year 1912 showed a large increase of business over 1911; 2,205 policies were written; the total revenue received amounted to \$64,840 and the disbursements to \$63,164, leaving a balance of \$3,175 in the State treasury for future contingencies. The fees obtained were distributed as follows:

Paid deferred losses of 1911	\$ 358,40
Agents adjusting losses during 1912	2,447,62
Losses for 1912	57,936,69
Clerk hire	2,160,00
Postage	43,00
Printing	103,40
Advertising	9,95

1912 was an exceptionally hard year for hail insurance, and the losses from this source were probably unprecedented in North Dakota. The State Insurance department was therefore only able to pay fifty five cents on the dollar for losses incurred but the adjustments were made on a very liberal basis.

It was then that it became apparent that the rate of 20 cents per acre insured was an inadequate premium, and it was urged that the charge should be raised to 30 cents, which was done when the Act was amended in 1913. An alternative to raising the premium suggested in the report for 1912 was that the legislature should fix a minimum rate of five cents or less per acre, and levy a general tax on all real estate in accordance therewith, thus covering insurance for all, and making a rate so low and satisfactory that hail insurance would not be a burden to any; but, as we have seen, the advocates of a higher premium rate won the day.

The second biennial report, issued in December 1914, sums up the four years' work then accomplished as follows: the losses incurred in 1911 were settled on the basis of seventy cents on the dollar; in 1912 fifty-five cents on the dollar; in 1913 eighty-eight cents; and in 1914 sixty-five cents on the dollar.

These results must be considered as decidedly unfavourable, for if applied to a mutual hail insurance company they would mean that members would be required to pay, in addition to the regular premium, extra assessments respectively of 30 %, 45 %, 12 %, and 35 %, and by that time, as the report points out, members would probably have had quite enough of mutual insurance.

But in analysing the results of this venture into the realm of State hail insurance certain facts and factors must be taken into account.

During the years 1911 and 1912 the rate charged by the State was twenty cents per acre, or 2 ½ per cent on the dollar; at the same time

the rates charged by the old stock companies ranged from 6 ½ to 8 per cent on the dollar. The State insured one hundred and sixty acres of grain for thirty-two dollars and fixed the loss maximum at \$ 1,280. The old stock companies insured the same acreage for not less than sixty-five dollars, with a loss maximum of \$ 1,000. In other words, the State gave the insured twenty-eight per cent greater value to his crop than did the private companies, while the actual cost was very much less in the former than in the latter case, based upon either total or partial loss. At the same time the loss paying power of the State, based upon the premium income, was insignificant from a comparative standpoint. State hail insurance reached high tide in 1912, when the premium income amounted to \$ 64,840 while the income in this State of seven private companies averaged in excess of \$ 152,000 each.

Nor is that all. The stock companies will accept the hazard of only a certain limited amount of insurance in each section or each township, while the State takes the risk of the entire farm, even though it embraces several contiguous sections. Finally, nearly all the private companies write hail insurance in several States, and this wide diffusion of risk naturally minimises the chance of loss.

Thus it will be seen that the State has laboured under the disadvantages of a comparatively low rate, small income, and extreme chance of loss for reasons above noted. On the side of expense of management the advantage is decidedly in favour of State insurance; but even this advantage is largely theoretical on account of the small volume of business transacted.

§ 3. BALANCE SHEETS.

The following statements show the condition and affairs of the State Hail Insurance department for the four years 1911 to 1914 inclusive.

1911. — RECEIPTS.

Receipts by State Treasury during 1911 from country treasurers				\$26,119.54
Amounts overpaid by county treasurers:				
Divide county	\$10.00			
Bottineau county	10			
Morton county	4.80	14.90	26,104.64	

DISBURSEMENTS.

Paid for losses	\$21,188.03		
Paid agents for adjusting losses	864.55		
Clerk hire	1,580.00		
Postage	237.88		
Printing	384.75		
Advertising	36.15		
Office supplies	170.95		
Express	47.35		
Total	\$24,609.66		
Refunds to Bottineau county	10		
to Divide county	10.00	24,619.76	
Balance on hand Jan. 1st, 1912		\$1,499.78	
Amounts not paid. Loss adjustments not ap- proved	322.00		
Adjusters' fees not approved	43.65		
Refund due Morton county	4.80	370.45	
Surplus or excess of assets over liabilities		\$1,129.33	

POLICY EXHIBIT.

Number of policies issued in 1911	1,011
Number of losses reported in 1911	131
Number of losses allowed in 1911	130
Number of policies effected	131

Total amount of losses allowed for season of 1911 \$30,780.63

Expense paid for adjusting same 1,011.70

making it cost 3.28 % to adjust the losses.

Approved adjustments were paid at 70 % of loss allowed for 1911.

1912. — INCOME.

Cash in hands of State Treasurer December 21st, 1911 . . . \$1,499.78

Cash received as payment of policies in 1912 64,840.37

Total amount received during the year \$66,340.15

DISBURSEMENTS.

Paid losses incurred during the year 1911	\$358.40
Paid agents for adjusting same	47.15
Paid losses incurred during the year 1912	57,936.69
Paid agents for adjusting same	2,447.62
Clerk hire	2,160.00
Postage	43.00
Printing	103.40
Advertising	9.95
Refund to Morton County	4.80
Special adjuster's expenses	53.25

Total amount of disbursements during the year 1912 . . . 63,164.26

Balance cash on hand Jan. 1st, 1913 \$3,175.89

POLICY EXHIBIT.

Number of policies issued in 1912	2,505	
Number of losses reported in 1912	433	
Number of losses allowed during 1912	411	
Number of policies effected	391	
Total amount of losses allowed for season 1912		\$105,339.54
Expenses paid for adjusting same		2,447.62
making it cost 2.32 % to adjust the losses.		

Approved adjustments were paid at 55 % of loss allowed in 1912.

INCOME.

Cash in hands of State Treasurer Dec. 31st, 1912	\$3,175.89
Cash received as payment of policies issued in 1913.	27,214.37
Total amount received during the year	<u>\$30,390.26</u>

DISBURSEMENTS.

Paid losses incurred during 1912	\$1,559.42
Paid losses incurred during 1913	24,890.78
Paid agents for adjusting same	694.53
Clerk hire	1,927.50
Postage	53.86
Printing	377.00
Express	21.22
Total disbursements during 1913	<u>\$29,524.31</u>
Balance cash on hand Dec. 1st, 1913	\$865.95

POLICY EXHIBIT.

Number of policies issued in 1913	733	
Number of losses reported in 1913	91	
Number of losses allowed in 1913	89	
Number of policies effected	88	
Total amount of losses allowed for the season of 1913		\$28,284.98
Expense paid for adjusting same		694.53
making it cost 2.45 % to adjust the losses.		

Approved adjustments were paid at 88 % of loss allowed for 1913.

1914. — INCOME.

Balance, cash in hands of State Treasurer Dec. 1st, 1913	\$865.95
Cash received as payment of policies issued in 1914.	<u>27,771.72</u>
Total amount received during the year	\$28,637.67

DISBURSEMENTS.

Paid W. D. Lukins, official adjuster Williams County for adjusting one loss for 1913	10.00
Paid losses incurred during 1914	24,985.39
Paid agents for adjusting 1914 losses	871.71
Paid clerk hire	1,800.00
Paid postage	89.98
Paid printing	80.67
Paid miscellaneous supplies.	10.25
Paid for publishing notices of condition of Hail Department for 1913	<u>14.09</u>
Total disbursements during year 1914	\$27,862.09
Balance cash on hand Dec. 1st. 1914	<u>775.58</u>

POLICY EXHIBIT.

Number of policies issued in 1914	761
Number of losses reported in 1914	114
Number of losses allowed in 1914.	113
Number of policies effected	114
Total amount of losses allowed for season of 1914	\$38,439.07
Expense paid for adjusting same	871.71
making it cost 2.26 % to adjust the losses.	
Approved adjustments were paid at 65 % of loss allowed for 1914.	

BRITISH INDIA.

CATTLE INSURANCE IN BURMA.

by A. E. ENGLISH, I. G. S.

Registrar of Co-operative Societies, Burma.

After some six years' experience in the introduction of co-operative credit into the various districts of Burma it became clear that one of the chief causes of indebtedness was the loss of plough cattle by death from disease or accident. In accordance with the obvious fact that insurance providing for the replacement of cattle so lost, and for the evolution of a spirit of corporate responsibility for the tending of cattle, was preferable to the mere granting of credit to replace such dead beasts, efforts were made to discover a simple and suitable system of insurance of plough cattle suitable for Burma.

The matter was complicated because Burma has a variety of climates, crops, crop seasons, cattle and systems of cultivation and methods of cattle tending. Speaking broadly there is the southern wet zone where rice is cultivated in the rains (June to November), where the rainfall varies from 80 to 150 inches and where it is never cold; then there is the northern wet zone comprising five hilly districts where the rainfall averages 80 inches and rice is the main crop, and where there is a distinct cold season; and between these there is the central dry zone with a rainfall varying from 15 to 40 inches, liable, where not irrigated, to serious droughts and having for two or three months a very high temperature (100 to 115 degrees. F.). In this dry area there is a large variety of crops. On the uplands are grown cotton, sessamum, ground-nut, jowar etc. in the rainy months (June to November); sugar-cane, rice, onions and pulses are grown throughout the year under irrigation; and pulses, potatoes, chillies, and other miscellaneous crops are raised in alluvial land along the river in the dry weather (November to April).

In the north and south wet zones the buffalo was till recently the principal draught beast. In the Delta districts, however, the buffalo's susceptibility to rinderpest has brought about an ever extending use of bullocks, and there is now a large annual export of bullocks bred in the dry zone to Lower Burma for ploughing and carting purposes. In the northern wet

zone, where soils are heavy and weeds strong and where cattle are also used for timber extraction, the buffalo remains in favour, but the village herds are still liable to terrible epidemics of rinderpest.

The systems of cattle tending differ widely in the wet and dry zones. In the southern wet zone the grazing ground system is the rule. Each village has an area, generally uncultivable, allotted to it for grazing purposes, and in this area the village cattle have to pick up a precarious living. In many cases these areas are in the rains seas of mud, covered with a trampled growth of coarse muddy grasses. They provide the best possible means for spreading infectious disease and the cattle that have to exist on them naturally have an excellent chance of dying from disease, starvation, or exposure. The mortality in such districts is very high and many cultivators regard four years as the working life of an imported beast. It is probable that a premium of 15 per cent would not cover the risk in this part of the country. In the northern wet zone the area of "jungle" available for grazing is as a rule much larger and there is a certain amount of segregation during grazing. Violent epidemics are unusual except from the unusually infectious disease of rinderpest. These jungles, however, contain a danger from which the southern grazing ground is free and that is wild cattle — bison, deer and pigs from which anthrax and other diseases are undoubtedly communicated to tame cattle. If insurance be ever extended to the northern districts a high rate of premium will be necessary. In the dry zone districts the custom is that draught cattle, which are almost entirely bullocks, are stall fed, while cows and calves are grazed in herds in scrub jungle near the villages. The stall fed draught cattle are carefully fed and housed and seldom suffer from epidemics. The breeding herds are tended with much less care and suffer from scanty fare, bad housing and dirty pens. In a season of drought the cows and calves die in large numbers. Disease also kills them off in quantities. Except in a few very restricted areas cows are not used by the Burmese for milking purposes and it is somewhat surprising that with the treatment they get they produce such good draught stock.

In view of the above conditions it was obvious that the first experiments in insurance must be restricted to draught cattle, and to such cattle only in selected dry zone districts where the stall feeding and careful tending of such animals was the rule. The Registrar of Co-operative Societies suggested the adoption of a system whereby animals would be valued half-yearly and insured for a half-year at a time, and it was decided to limit the experiment in the first instance to five adjacent districts, i. e. Mandalay, Shwebo, Sagaing, Kyaukse and Meiktila, in all of which such statistics as were available showed that violent epidemics of infectious disease among draught cattle were unusual.

Co-operative cattle insurance was discussed at the Provincial Agricultural and Co-operative Conference held at Mandalay in 1911, after six mutual co-operative cattle insurance societies had been formed, and it was resolved that insurance was desirable and feasible and that the scheme should be proceeded with. In the period between July 1911 and June 1912 seventeen, and in the year 1912-1913 thirty-six societies were formed. It

then became evident that in the early years, to render certain payment of part at any rate of the indemnity, reinsurance was essential. It also appeared that insurance would not become really popular unless deaths from rinderpest were covered.

The whole subject was again discussed at the Agricultural and Co-operative Conference held at Mandalay in August 1913: and in a meeting which over 300 chairmen of agricultural credit societies attended it was then resolved that the premium rate should be raised from $3\frac{1}{8}$ per cent. to 5 per cent. per annum, and that rinderpest deaths should be covered; that a central reinsurance society was essential; and that to eliminate the risk of fraud membership of cattle insurance societies should be restricted to persons who are members of co-operative credit societies.

The sanction of the Secretary of State for India to the grant, by way of an interest free loan, to the central reinsurance society of assistance to enable it to meet indemnities in the early years, was received early in 1915. The amount to be drawn in any one year is not to exceed Rs. 25,000 (1) and repayments are to be made from the sixth year onwards from the central society's reserve fund.

Cattle insurance was again discussed at the Agricultural and Co-operative Conference held at Mandalay in August 1915; and it was resolved that the central reinsurance society should be formed, that in the five districts to which operations were at present to be confined every credit society should form an annexed cattle insurance society, and that for purposes of supervision a cattle insurance society should be admitted into the union to which the credit society, to which it was annexed, belonged.

The Upper Burma Central Co-operative Cattle Reinsurance Society, Limited, was registered in August 1915. The membership consists of some fifteen honorary members — persons interested in co-operative and agricultural improvement — and of affiliated village cattle insurance societies. It receives half the premia paid to societies by members and insures half the risk undertaken by such societies. Indemnities due are paid by the manager on receipt of a cattle death report giving full details. It is managed by a general meeting, committee and a manager. For the present the registrar is acting as honorary manager. To safeguard the interests of government, a government representative is a member of the general meeting and has five votes. It has a general fund, consisting of the current year's premium income, and a reserve fund consisting of the net proceeds of past years. The latter fund is banked with the National Bank of India and the general fund is kept in the Upper Burma Central Co-operative Bank. Societies submit to the manager of the central society half-yearly statements showing the names of members and number, descriptions and value of cattle insured.

The by-laws of the village mutual cattle insurance societies are based on those used by French mutual societies. There are the usual exceptions of deaths from war, theft etc., and societies do not pay indemnities where

(1) 1 rupee = 16 *as*.

the sanitary regulations as to contagious disease have been broken. Membership is restricted. Valuations are made half-yearly by three experts appointed yearly by the general meeting. Substitution is permitted if values are equal. The premium rate is 5 per cent. per annum payable half-yearly in March and September. Funds are deposited with the local credit society at call. Deaths have to be vouched for by the experts and the society only pays two thirds of the value insured. The skin and flesh belong to the society which sells them, if saleable. Hence the owner stands to get two thirds of the value insured, whether his animal dies of a contagious or non-contagious disease. Societies are managed by a general meeting and a committee.

Pending the formation of the central reinsurance society, the formation of village societies was restricted, and in the period July 1914 to June 1915 only seven such societies were registered. In the year July 1915 to June 1916, 247 societies have been registered and a further considerable increase is expected in the coming year. Of the 305 village societies in existence on 30 June 1916 about a hundred had not yet become affiliated to the central society. The bulk of the new societies registered only started business in March or April 1916, and results cannot therefore be appreciated till October next, at the earliest.

Judging by the steady accumulations of funds by those societies which have been working for several years, and in view of the fact that only two thirds of the value is paid in indemnity, there is ground for believing that the 5 per cent. rate of premium is unnecessarily high and somewhat likely to hinder the progress of insurance. Burma has, however, except in the northern wet zone, enjoyed a remarkable measure of immunity from rinderpest in the last ten years. As it is yet too early to say that this immunity is due to the improvement in veterinary control, and not rather to good fortune and disease cycles, it is perhaps better to err on the safe side in the matter of the premium rate.

Many of the villages in which cattle insurance societies are formed are in tracts only partially served by the Post Office, and there is consequently difficulty both in remitting premia to the central society and in the payment of indemnities. Such difficulties of course check expansion but they will decrease with time.

In three areas during the year ending 30 June 1916 epidemic disease — anthrax — appeared and accounted for mortality above the average.

There is every indication that the adoption of co-operative cattle insurance in these five districts where co-operative credit is already well established will promote better protection of cattle against disease, better relations with the Veterinary Department, and a decrease in mortality.

The statements given below show results to 30 June 1916. It has not been necessary to draw upon the government guarantee loan.

Cattle are at present often undervalued: they average about Rs.30 per head whereas a truer average would be Rs. 40. The proceeds of skin and flesh have exceeded expectations.

The societies are audited, along with the agricultural credit societies

to which they are annexed, by the staffs of society paid and government auditors, supervision being done by the inspectors maintained by unions of credit societies.

It is yet early to gauge results or to prophesy, but it may be said that the principles of insurance appeal to the Burman and that in the districts where a commencement has been made the co-operative idea has taken firm hold. Thus in the Kyaukse district there is one agricultural co-operative society (credit) for every 1050 acres of cultivated land, while, in addition to co-operative credit, considerable progress with co-operative production and sale has been made in the districts of Mandalay, Sagaing and Shwebo. If the high premium rate do not act as a deterrent, and if minor difficulties connected with remittance can be eliminated, there is no reason apparent why co-operative insurance of cattle should not become firmly and widely established.

I. — Operations of Cattle Insurances Societies in Burma.

Societies	On 30 June 1916		Amount of risk insured on 30-6-16	Premia collected during the year	Number of Animals.		Claims paid during year	Cost of management during year	Funds at end of year	Amount of risk reinsured.	Amount of premia for re-insurance.
	Mem- bers				Insured on 30-6-16	Lost during year					
			Rs	Rs			Rs	Rs	Rs	Rs	Rs
305	5,045	287,051	9,737	7,929	75	685	219	10,671	113,050	4,022	

II. — Operations of the Upper Burma Central Cattle Insurance Society.

No. of affiliated societies.	Proportion of risk affiliated societies reinsured	Amount of risk reinsured.	Premia collected during year to 30-6-16	Number of animals covered by affiliated societies.		Claims paid to affiliated societies.	Cost of management.	Funds in hand at end of year 30-6-1916	
				Insured.	Lost.			General Fund.	Reserve Fund.
		Rs	Rs			Rs	Rs	Rs	
305	1/2	113,050	4,022	6,209	37	247	148	2,113	1,513

Part III: Credit

AUSTRIA AND HUNGARY.

AGRICULTURAL CREDIT IN BOSNIA AND HERZEGOVINA.

OFFICIAL SOURCES :

- DIE LANDWIRTSCHAFT IN BOSNIEN UND DER HERZEGOVINA (*Agriculture in Bosnia and Herzegovina*) Vienna, 1899.
VERWALTUNGSBERICHTE FÜR 1906-1911 (*Government Reports for 1906-1911*).

OTHER SOURCES :

- V. HOROWITZ (E. R.) : DIE BEZIRKUNGSUNTERSTÜTZUNGSFONDS IN BOSNIEN UND HERZEGOVINA (*The District Loan Funds in Bosnia and Herzegovina*) Vienna, 1892.
SCHMID (DR. F) BOSNIEN UND HERZEGOVINA UNTER DER VERWALTUNG OESTERREICH-UNGARNS (*Bosnia and Herzegovina under the Rule of Austria-Hungary*) Leipzig, 1914.

§ 1. RURAL CREDIT IN BOSNIA AND HERZEGOVINA UNDER TURKISH DOMINATION.

In the time of Turkish domination social and economic conditions in Bosnia and Herzegovina were little favourable to the development of credit in general and completely opposed to that of agricultural credit. In the country the ruling system was one of simple natural economy. Each farm sought itself to produce whatever it needed or desired solely from its own soil rendered fruitful by labour. Agricultural labourers made purchases on the market only exceptionally, when they could not supply their needs from the land they cultivated, as when they required colonial products, agricultural implements, cotton stuffs, etc. Such purchases were so limited

that they accounted only for an unimportant circulation of money. Defective means of communication and the presence of the institution of the *Zadruga* contributed much to the long preservation in Bosnia and Herzegovina of natural economy in all its simplicity, after it had elsewhere been replaced by economic systems based on money.

We should add that in these two Slav provinces the development of agricultural credit was impeded by the existence of jurisdictional relations feudal in type, which even today have not entirely disappeared and which mutually connect the feudatory *agas* and the *kmeti* agricultural labourers. In Bosnia and Herzegovina property in land is indeed not free even today but is subject to an almost feudal regime. It is burdened with the *kmeti* cultivators' rights of usufruct, which are unlimited as to time and conditions, so that if a holding be alienated the cultivator's usufruct persists unmodified by the change of ownership. The mere indication of such a state of affairs is enough to show that it has contributed and still contributes to impede the development of land credit in this country.

Another hindrance to such development was the complete absence of a cadaster and of registers of land, in other words of a basis for mortgage credit.

* * *

For that matter the peasant of Bosnia and Herzegovina felt no great need for credit. If he wanted money he got it easily by selling the products of his land to some small dealer in the neighbouring town, from whom afterwards he bought what he required; otherwise he could not have obtained that very limited quantity of the products of agriculture or industry necessary to him. Sometimes indeed he had to have recourse to a loan, but it was always this same small dealer who became his banker.

Such loans had three different forms: a) loans in specie were received; b) manufactured products were bought for credit; c) provisions were bought for credit generally in spring or summer, before the harvest.

The peasant paid a *grosch* a month on the sums thus lent, that is to say 10 per cent. The law established that the rate of interest should not surpass 12 per cent. but this limitation was eluded by lumping the amount of the interest and the capital. Very often also it was agreed that the debt should be repaid not in specie but in kind, in other words in agricultural products of which the quantity was fixed by the deed of loan, which therefore created a contract truly contingent on risks.

In the case of a purchase of provisions or manufactured products for credit, the interest attaching to the correspondent value in specie was considered not as being separate but as swelling the sum which the debtor had to repay. The rate of this interest varied in the proportion in which the purchase price of the goods bought for credit surpassed the usual cash price by from 50 to 100 per cent.

The contract established whether interest should be paid in specie or in kind. In the latter case it was equivalent, when the debt had been incurred by a purchase of provisions, to the difference between the quantity of provisions received on loan, and the quantity paid back when the term of the loan expired. Generally the latter surpassed the former quantity by from 50 to 100 per cent.

The loans in specie might in certain respects be called agricultural loans for the peasants were the only class of the population who could obtain them, they sought them at least partly for reasons inseparable from agriculture, and in greater or less proportion they repaid them with the products of the soil.

The same cannot be said as to credit operations made with certain special funds, such as the funds of churches and mosques, those of the Vakouf properties and of the unions, those guaranteeing the property of wards, etc: None of the institutions managing these funds granted loans to peasants but only to traders and artisans.

When however the middle of the century had been passed the Turkish government made a first attempt to encourage the development of agricultural credit, and formed the institutions known as *menafi sandouks*. Founded in all the vilayets of Bosnia and Herzegovina they were specially intended to utilize their funds in granting loans which should favour the development of agriculture. Their funds were derived from a tax incumbent on all the peasants and equivalent to a tenth of the value of all the products of the soil, exclusive of the usual tithe.

At first the *menafi sandouks* only granted loans in kind, and in this respect they acted as real institutions of land credit. Later however they substituted loans in specie for loans in kind. Little by little they lost their special character as institutions for the encouragement of agriculture and were transformed into credit institutions. They granted loans generally to government servants or to traders and hardly ever to peasants. Thus the intention of the law was defeated by facts. As regards the history of these special credit institutions, the first *menafi sandouk* was formed in 1863 by Mitad Pacha, vali of the vilayet of the Danube. In 1865 a law was promulgated which decreed that they should be founded in all the vilayets of the Turkish empire.

§ 2 DEVELOPMENT OF AGRICULTURAL CREDIT IN BOSNIA AND HERZEGOVINA AFTER THE AUSTRIAN AND HUNGARIAN OCCUPATION.

The occupation of Bosnia and Herzegovina by Austria and Hungary contributed largely to the improvement in these two provinces of the conditions of agricultural credit, to which it gave a new impulse.

In the first place the population, both floating and fixed, was very perceptibly increased, by the added military element which was very numerous in the early days of the occupation, and by the government servants who also were present in sufficiently important numbers. Especially the latter

formed among the citizens of the country a special class, who in the existing conditions were obliged to buy all they needed in the market with their money. The immediate consequence of this rapid and notable increase in the population was a corresponding increase in the price of all the goods in the market.

Added to this first cause, which had an immediate effect on the economy of the country, was a second — the construction of new lines of communication. These had a propitious influence on the development of trade which they rendered more active, and not only the trade within every inhabited district in the country but also foreign trade. Thanks to these elements of progress the general activity of the market was more and more intensified, the quantity of products on the market increased, and an economy based on cash gradually replaced natural economy in the country. Thus the indispensable and fundamental basis for credit was found. The institution of the land registers and of the cadaster, begun in the first period of occupation and actively continued, finally completed the work undertaken for economic progress, in that it gave the necessary basis to mortgage credit.

Special institutions of agricultural credit were founded, and they largely contributed to the improvement of the country's general economy. We will proceed to speak of them.

§ 3. THE INSTITUTIONS OF RURAL CREDIT.

A. Mortgage Credit.

The institution of land credit in Bosnia and Herzegovina is due to the initiative of the Austrian and Hungarian government.

In 1883 a first contract between the government and the *Wiener Unionbank* was drawn up for this purpose.

By its terms this bank was bound to instal at Sarajevo a branch which should begin to afford land credit in the country.

The government for its part engaged: 1) to furnish this bank with all information relative to the solvency of debtors; 2) to authorize the post offices of the country to receive the annual payments owed by debtors on behalf of the *Wiener Unionbank*.

But the *Wiener Unionbank* afforded land credit only for three years. In 1886 it ceased to grant mortgage loans, thus obliging the government to enter into a new contract with the fund for the retirement of State employees.

According to the rule of 1887 this fund makes loans of two kinds, as follows:

a) Ordinary mortgage loans, that is loans of sums the use of which is not controlled. Loans of this kind may be made only when the mortgaged land is entered in the land registers.

b) Special mortgage loans granted to the *kmeti* (cultivators) in order that they may free the lands they till from feudal burdens due to the *aga*

(owners) or in order that they may make some improvement on such lands. These loans are granted even without the guarantee of the special registration by the *kmeti* of the lands they till in the land registers. The fund however controls the debtor's use of the money he borrows.

The loans are always for long terms (ten years) and the rate of interest does not surpass 6 per cent. The fund may not grant loans of which the value is more than half the estimated value of the mortgaged lands.

In 1889 however the society managing this fund ceased to act as an institution of mortgage credit. All its credit was thereupon transferred to another and newly formed institution which carried on credit operations under the name of Mortgage Bank of Bosnia and Herzegovina.

The contract between this bank and the government has the following terms :

a) The mortgage bank is authorized to issue mortgage bonds for a total value equal to twenty times the reserve fund which was at first 200,000 crowns (1).

b) The State engages to provide the mortgage bank with the capital necessary for effecting in the interests of the *kmeti* the operations necessary to freeing the lands they till from all feudal burdens owed to the *aga*.

c) The government offices of taxes are bound to furnish the bank with all necessary information as to the solvency of debtors, from whom also they are obliged to recover the annual payments due to the bank.

d) The bank grants mortgage loans for long terms — ten to twenty years — charging interest at the rate of 6 per cent.

The mortgage titles issued by the bank bring in 5 per cent.

In 1895 the mortgage bank of which we have spoken was succeeded by another institution having the same object and called *Landesbank für Bosnien und die Herzegowina*.

The formation of this new institution and the supersession of the earlier one were due to the government's desire to augment circulating capital. With this aim the following measures were undertaken :

1) The new bank was founded with a share capital of 10,000,000 crowns.

2) It was authorized to issue mortgage bonds up to a value thirty times that of its share capital.

3) It enjoys all the privileges previously granted to the mortgage bank.

Side by side with the credit institutions we have named, which emanated from the government directly and therefore enjoyed special privileges and had a more or less official character — since they undertook credit transactions under the State's direct superintendence —, others were formed by the initiative of private persons. Their activity was much limited, yet it was nevertheless to some extent that of institutions of land credit. Among them were the various local banks, the Austrian and Hungarian banks,

(1) 1 crown of gold = $10 \frac{1}{12}$ d at par.

certain special institutions disposing of their own funds, and private creditors.

The statistical data regarding land credit in Bosnia and Herzegovina are few and incomplete. From the official reports published before 1907 we learn only the total amount of the country's mortgage debt, no distinction being made among institutions and persons having such credit. It is only after 1907 that these statistics give us data relative to the different classes of mortgagers. These data show that the total sum of the country's mortgage debts was 141,832, 244 crowns in 1909.

The following table shows the proportion in which the different mortgagees had part in operations of land credit in 1907-1908 and 1909.

Creditors	Number of New Grants of Credit			Amount of New Credit Granted		
	1907	1908	1909	1907	1908	1909
Landesbank	1,787	2,106	1,551	6,191,363	7,796,140	6,988,956
Other local credit institutions	689	1,191	1,443	2,094,318	2,682,752	3,383,092
Austrian and Hungarian credit institutions	221	162	220	495,923	456,991	1,248,507
Local public funds:						
a) <i>Vahouf</i> funds	461	408	293	80,607	69,719	49,275
b) Church	134	107	143	53,554	53,235	100,414
c) Departmental funds	412	390	492	84,740	169,897	246,695
d) Various	61	8	48	423,676	6,373	40,082
Public Austrian and Hungarian funds	30	—	—	133,099	—	—
Wards' funds	173	234	201	115,255	213,273	168,174
Treasury fund	148	219	388	192,019	726,728	159,316
Private creditors	6,189	6,551	7,554	4,216,127	5,809,185	4,509,352
Total	10,305	11,376	12,333	14,080,681	17,984,293	16,983,863

The following Austrian and Hungarian institutions conduct credit operations in Bosnia and Herzegovina :

- 1) The Credit Bank of Laibach,
- 2) The Serbian Bank of Budapest,
- 3) The Savings Bank of Luboliza,
- 4) The Serbian Bank of Zagreb.
- 5) The Savings Bank of Zagreb.

These are however only the chief among them.

In 1908 a law as to the issue of mortgage titles was promulgated. There are however no statistical data relative to them except for the last five years, and we can therefore make no deductions as to the law's effects.

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Among the different kinds of mortgage loans those having reference to the redemption of lands in the interest of the *kmeti* have a very special importance to the problem of agriculture in Bosnia and Herzegovina.

Until 1910 mortgage credit was granted to *kmeti* by precisely those semi-official institutions which we have already mentioned, especially by the *Wiener Unionbank* until 1886, by the Mortgage Bank from 1886 to 1905 and by the Landesbank from 1895 to 1910.

The terms offered by these various institutions of credit for the purchase of land and its enfranchisement from feudal burdens do not differ from those usual in the case of mortgage credit. Institutions conducting operations of the sort gave credit to borrowers within the limits of half the value of the properties mortgaged for purposes of purchase. The borrower was forced, in order to procure the other half of the sum he needed for the redemption of the land he tilled, to have recourse to capitalist usurers or to sell his live stock.

As regards the term of operations of this sort it may be said generally to have been long — from fifteen to twenty years. The rate of interest was 6 per cent. and could be raised to 8 per cent. only in the case of delay. If the sums necessary for the redemption of a holding were provided by the Treasury the rate of interest varied from 3 to 6 per cent.

In the period between 1879 and 1910 the official institutions we have named lent the total value of 23,129,975 crowns for the redemption of lands.

The official report for 1906 on the administration of Kalaj, governor of Bosnia and Herzegovina, and the conclusions to be drawn from it deserve special notice.

Kalaj's policy is criticized. The first governor of the two provinces as occupied by Austria and Hungary is accused of having neglected the agrarian question and wishes are expressed that his successor may give it all its rightful importance.

Count Burian, who was Kalaj's immediate successor, showed that he had well understood this importance. His whole policy aimed at eliminating the difficulties in the way of solving the agrarian question in Bosnia and Herzegovina.

A first attempt to solve that part of this difficult problem which related to the redemption of lands in the interest of the *kmeti* was made by Burian, who entered into negotiations with the Commercial Bank of Budapest. But this attempt did not succeed, and the government undertook the direct granting of mortgage credit for the purchase of the lands.

With this object and on the basis of the provisions of the law of 1911 a new administrative department was attached to the government of Bosnia

and Herzegovina. It was called the department for the purchase of lands and was given competence in all matters touching on this question, in particular competence to afford mortgage credit in order to solve the problem of the *kmeti*.

The initial capital of 500,000 crowns was provided by the State, on condition that capital should in the future be procured by the issue of mortgage titles, guaranteed by the State, and bearing interest at the rate of $4\frac{1}{2}$ per cent.

The administrative department we have mentioned, which exists for the redemption of lands, grants loans up to the total value of the mortgaged land. The loans are for long terms, from thirty to fifty years, and bear interest at the rate of $4\frac{1}{2}$ per cent. The sum which is due to the *aga* as a consequence of the redemption, because he has renounced his rights in the land, is paid to him in specie unless he himself prefer whole or partial payment in mortgage titles.

The department for the redemption of lands also provides, in the form of loans, the sums necessary to the conversion of debts incurred before a given holding is redeemed.

This institution granted between the beginning of 1912 and the end of October 1913 11,258 loans having the total value of 20,250,000 crowns, which sum was distributed as follows : two thirds to the redemption of lands burdened when the loan was incurred with feudal servitudes, and one third to the conversion of debts previously contracted for the purpose of redemption.

B. Personal Agricultural Credit.

The institution of personal agricultural credit is due, like that of mortgage credit, to government initiative and government measures. Credit of this kind is directly afforded by the *Bezirksunterstützungsfonds*, that is to say the departmental credit banks. The first of them was founded in the department of Gazco in 1886. They have since been multiplied throughout the country to such an extent that today they number no less than fifty, namely one for each department. They are truly State credit institutions, and are managed by the administrative authorities of the departments, helped in each department by a sort of assembly to which peasants belong. Until 1905 these assemblies had only a consultative capacity and therefore did no more than supply the departmental administrative authority with useful information as to the solvency and reliability of those applying for personal loans and the purpose for which such loans were intended. The right to resolve as to the acceptance or the rejection of an application for a loan was exclusively reserved to the departmental administrative authority. Since 1905 however the power to vote on resolutions of this kind has been extended to the peasants' assembly, for a reason which must be explained. In this year the law established that all the taxpayers of a department were liable for the debts to the Landesbank which the departmental bank might incur. The grant of a vote to the peasants con-

stituting the assembly of this fund should be looked upon as a direct consequence of the personal liability thus imposed by the law on all the peasants of the assembly.

As regards their own capital the departmental banks have much in common with the other existing institutions of the same kind, of which we have already spoken and which are called *Menafi Sandouks*.

The same course was taken in the case of the departmental banks as in that of the *Menafi Sandouks*. The system was adopted of causing all the peasant taxpayers in a department in which there was a bank to take part in contributing to its capital. They were obliged to pay a tenth of the value of the lands they tilled in addition to the ordinary tithe.

The State also takes part in the endowment of the departmental banks, furnishing each of them with a capital of from 10,000 to 20,000 crowns. To augment this endowment the capital of the abolished *menafi sandouk* in each department has been added to it, but this contribution is of little importance.

The capital which each departmental bank owns is of three kinds : 1) capital in shares, 2) reserve fund, 3) fund destined for objects of social utility.

The by-laws of each bank fix the amount of its capital in shares and its reserve fund. The contributions of the peasants are first accumulated to form the capital in shares. The net profits of each year are on the other hand paid into the reserve. When the sums previously fixed, as has been said, as the respective amounts of the capital in shares and the reserve fund have been accumulated, two thirds of the net profits go to augment the capital in shares and the other third is paid into the fund destined for objects of social utility.

Until 1886 the departmental banks disposed only of their own capital formed in the manner described. Since that date they have received, as has already been said, the power to borrow from the Landesbank an amount no greater than the capital with which a borrowing bank is endowed. Subsequently, that is after 1905, this maximum limit was raised to include a sum twenty times the amount of the capital of the bank desiring to borrow. This power to borrow is however subject to the condition that liability for the debt incurred be assumed collectively by all the taxpayers of the department in question. This explains still further what we have already said as to the reason for granting a deliberative vote to the peasants belonging to the assembly of a departmental bank. On loans of the kind in question the departmental banks pay interest to the Landesbank at a rate 1 per cent. in excess of that officially exacted by the Austrian and Hungarian Bank.

The law of 1909, which gave to the departmental banks the right to receive savings deposits and employ them for the objects for which these banks were formed, gave an impulse of increasing force to their development. According to the general by-laws which regulate their activity the departmental banks grant personal loans which may be divided into two classes :

The first class (group A) comprises loans for maintenance, that is loans made to peasants in bad years to enable them to live until the following harvest. These may not surpass 200 crowns or be for a longer term than one year, and the reserve fund serves to provide them. The interest charged on them was at the rate of 4 per cent. until 1910 when it was raised to 5 per cent.

No guarantee is needed for personal loans of less than forty crowns. Above this sum the banks require the signature of a surety.

The second class (group B) comprises productive loans, such as may be granted to peasants for the purchase of live stock, agricultural implements, etc. Until 1905 the maximum limit of the sums which the departmental banks might lend to an isolated individual were not fixed by a bank's by-laws but by a government decree, published for this purpose every year. However in the case of a really exceptional need it was customary for the government to give a special authority to the banks.

The law of 1905 fixed the limits of personal credit. It was established that ordinarily it should not surpass 600 crowns and that a special authority from the government was needed for larger sums. Loans of this kind were for short terms — one year — and the interest attaching to them was at the rate of 6 per cent.

Departmental banks having a reserve fund which has reached the sum anticipated by the by-laws, and having formed a fund for objects of social utility in the manner described, are authorized to grant out of the latter fund all loans which tend to the realization of these objects. They may also make grants to religious enterprises.

Until 1908 loans were granted in specie but subsequently in kind. The departmental banks are also in the habit of buying agricultural implements, seeds and goods of various kinds, in order to sell them to the peasants for credit.

The official statistics for the years from 1905 to 1910 give us the following table relative to the working of the departmental banks :

	1905	1906	1907	1908	1909	1910
Credit granted.	3,162,843	3,079,242	4,939,462	6,705,858	6,411,433	5,885,450
Debts repaid. . .	2,916,838	2,772,205	2,987,990	4,077,831	5,452,778	5,402,132
Debts not repaid.	1,175,645	1,464,221	3,325,479	5,935,985	6,840,457	7,323,774
Capital in shares.	3,432,086	3,539,329	3,713,668	3,851,175	3,881,178	4,069,707
Credit granted	3,707	1,373	—	13,977	2,196	120
Debts repaid. . .	13,468	9,827	5,724	4,439	3,387	3,683
Debts not repaid.	43,475	34,995	29,290	38,822	38,475	34,912
Reserve fund. . .	251,156	244,472	253,848	258,575	259,146	261,920
Fund for objects of social utility.	—	—	—	41,200	142,315	202,012

In Bosnia and Herzegovina social and economic relations did not favour the development of rural co-operative societies in the time of the Austrian occupation. The people of the two provinces are naturally conservative and opposed to any innovation. They are moreover too poor to be

able to accumulate the savings necessary to the formation of popular banks and the constitution of bases for the operations of these. The man who was first called upon to govern Bosnia and Herzegovina had also a conservative spirit. Kalaj's economic policy was always inspired by the idea that all innovations were to be avoided because they might run counter to the ancient customs of this primitive people and provoke discontent and disorder. We must add that religious hatred had a certain influence in placing obstacles in the way of the spirit of association in a country in which the adherents of one faith always felt themselves too different from those of another to be able to unite with them for any object whatsoever. The departmental banks eventually contributed to no negligible extent to bringing home to the peasants of Bosnia and Herzegovina the need for co-operative credit societies. The first co-operative society of this kind was founded in 1909, after which year about a hundred of them were formed, most of them Raiffeisen in type although at first it was the Schulze-Delitsch type which predominated and which the government favoured. Of late years however the Schulze-Delitsch has gradually given place to the Raiffeisen model, to which four fifths of the co-operative societies in Bosnia and Herzegovina now conform, one fifth being of the Schulze-Delitsch type.

There are no statistics relative to the activity of these co-operative societies, but their operations in credit are known to be unimportant. Statistics as to the personal credit afforded by credit institutions or private individuals are also lacking. In general credit institutions do not willingly make loans to peasants who are not allowed to give guarantees in the shape of bills. On the other hand numerous private persons, most of them usurers, are in the habit of exploiting this state of affairs by granting loans to peasants on onerous terms. These loans are said to be in the aggregate numerous and important in Bosnia and Herzegovina. The continual increase of the peasants' total debt to private individuals was largely due until 1910 to the defective solution of the problem of the *kmeti*. We have already said that the existing institutions of credit in Bosnia and Herzegovina do not lend to the *kmeti* more than half the value of the land these propose to redeem. The *kmeti* were therefore obliged to have recourse to the credit afforded by usurers in order to effect redemption. Therefore the redemption of lands, which was intended by the law to improve the condition of the cultivators of Bosnia and Herzegovina, served on the contrary, for the reasons given, to aggravate the economic situation of many of them.

Part IV: Agricultural Economy in General

ERYTHREA.

LAND TENURE AND COLONIZATION.

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§ 1. ADMINISTRATIVE ORGANIZATION OF THE COLONY OF ERYTHREA.

A). General Remarks.

The name of Colony of Erythrea was given, by a royal decree of 1 January 1890, N° 6592, to the Italian possessions on the western coast of the Red Sea. The political boundaries of Erythrea, as determined by the treaties in force, are as follows: on the east — the sea from Ras Caser (18°2' northern latitude) to Ras Dunierra (12°30' northern latitude) on the straits of Bab-el-Mandeb; on the north, north-west and west — that is to say towards Egyptian Sudan — the boundaries established by the Italo-British protocol of 15 April 1891, the ensuing agreements of 7 December 1898 and 1 June 1899, and the Italo-Britannico-Ethiopian convention of 15 May 1902; on the south, towards Ethiopia, a line starting on the west at the confluence of the Khar-um-hager and the Setit, following this river until it is joined by the Maiteb, and following the latter river — so that Mount Ala Tacura and the whole tribe of the Cunama are included in Erythrea — to the Marceb where it joins the Belesa and then to its junction with the Muna.

On the side of the French possessions of Obotz the boundary was determined by the Franco-Italian protocols of 24 January 1900 and 10 July 1901. It starts at the extreme point of Ras Dumeira, follows the dividing line of the waters of the promontory bearing that name for one and a half kilometres (1), then goes straight to the point on the Ulima called Bisidivo, from which point it is merged in the Ufina and so reaches the place called Daddato.

According to the last " *Annuario statistico italiano* " Erythrea has an area of 119,000 square kilometres and a population of 300,000 (2). According to the results of the census of 1905 the population of Erythrea was then 274,944, to whom must be added a floating population of 30,000, emanating from beyond the frontiers and immigrating for purposes of work, the European population and the population assimilated to it. The total population of the country may therefore be placed at 300,000 (3).

B.) Administrative Organization.

The organization of Erythrea is determined by the law of 24 May 1903, N° 205. In virtue of the organic administrative organization approved by the royal decree of 22 September 1905, N° 507 (4), the colony is ruled by a civil governor, nominated by royal decree on the proposal of the Minister of the Colonies advised by the Council of Ministers, this arrangement having been in force since the creation of the Ministry of the Colonies (Royal Decree of 20 November 1912, N° 1205).

The governor depends immediately and exclusively on the Minister of the Colonies. He directs the colony's policy, governs its people and administers its finance. He directs and is responsible for the colony's civil and military administration, and in the capacity of representative in the colony of the central government he has all the powers

(1) 1 kilometre = 1093.633 yards.

(2) The different authorities do not agree on these points, as is easy to imagine since countries imperfectly investigated are in question. ROSSETTI ascribes to Erythrea in his *Carta dimostrativa della Colonia Eritrea* (N° 3) Rome 1907, an area of 30,000 square kilometres and a population of 275,000. A little earlier Mulazzani in his *Geografia della colonia Eritrea* (Florence, Bemporad) gives it 130,000 square kilometres and 330,000 inhabitants. BARTOLOMMEI-GIOLI in *L'Eritrea Economica* (Istituto Geografico de Agostini, Novara 1913) gives it 118,609 square kilometres and 335,000 inhabitants. Melli in *L'Eritrea delle sue origini a tutto il 1901* (Milan, Hoepli) gives it 247,000 square kilometres and 327,000 inhabitants, basing his statements on the census of 1890, etc.

(3) Cf. A. M. TAXCREDI: *Notizie e studi sulla colonia Eritrea* (Roma, Casa Editrice Italiana 1913). See also in this connection MARMELLI and DAINELLI, *Atlante d'Africa* by GHISLERI. The results of the *Censimento della popolazione indigena della colonia Eritrea Anno 1905* are reported in the *Allegati alla Relazione sulla colonia Eritrea del R. Commissario civile F. Martini per gli esercizi 1902-1907* (Rome 1913) *Allegato* No. 11, pp. 17-95. The results of the *Censimento delle popolazioni europee ed assimilata della colonia* are in the same volume - *Allegati* nos. 12 and 13, pp. 103-133.

(4) See *Bollettino Ufficiale della Colonia Eritrea*, 21 October 1905, N° 42.

which the king's ministers can delegate. The seat of the colony's government is at Asmara. The governor acts through a government office, divided into directing departments the number and competence of which he establishes in accordance with needs. An Office of Accounts and a secretariat also depend on him; the former being especially charged to control the management of finances and report on it, while the latter has the custody of the archives and is concerned with general formularies and with the despatch of business relative to the colonial staff. The stewardship of the colony depends on the governor's secretariat.

In his examination of the most important administrative questions the governor is helped by a Council of Administration which has however only a consultative voice.

This council, over which the governor presides, is composed of the Director of Civil Affairs, the Director of Finances and Accounts, the President of the Court of Appeal and the commander of the corps of colonial troops. In special cases other officials of the colony can be summoned to its meetings.

To administer the colony's civil affairs a body of colonial officials, chosen among persons having the necessary physical and intellectual aptitudes, exists.

The colony's territory is divided into districts and governed by commissioners or residents whose jurisdiction and competence are defined by a governor's decree. At present there are eight commissioner's districts — namely Hamasien, Acchelé-Guzài, Seraè, Barca, Cheren, Massàna, Assàb and Gasc-Sétit. There are also the resident's districts of Sahel, Mareb, Scimenzana and Dancalia.

Civil and penal justice is administered according to the provisions of the royal decree of 9 February 1902, No 51, on the colony's judiciary organization, as modified by the royal decree of 27 March in the same year, No 126.

By the terms of the ordinance of 22 September 1905, already mentioned, the colony's defence is entrusted to a royal corps of colonial troops and to the ships stationed in the Red Sea.

§ 2. AGRICULTURAL CONDITIONS IN ERYTHREA.

A. — *Soil and Products.*

The soil of Erythrea is fertile, and — unless there are anomalies due to atmospheric phenomena or devastation by locusts — the natives obtain abundant and varied harvests by superficial and extensive husbandry. The climate, the hydrology and the soil of Erythrea combine to create conditions adapted to very diverse forms of agriculture, the most numerous and productive of which could not be practised in Italy (1).

(1) See in this connection *Allegato C. of the Relazione sulla Colonia Eritrea* (1910 and 1911) by F. MARTINI, presented by the minister Prinetti to the Chamber of Deputies during the session of 13 December 1912. (*L'agricoltura nell'Eritrea*. Report of the extraordinary civil royal Commissioner by Dr. GINO BARTLOMMEI-GIOLI).

To a brief examination of native agriculture, the distinction between agricultural zones — which is customary among the local population and accepted by most botanists and explorers in Ethiopian regions — is necessary. The natives are used to distinguish between three great zones, the different characteristics and aspects of which are marked by their altitude and consequently by the distribution of their flora. They are the *Quolla* or *Colla* (Hot Land), the *Uina Degà* (Mountain of the Vine) and the *Degà* (Mountain). The first rises from the sea-level to an altitude of about 1800 metres (1) and has an essentially tropical character. The chief crops cultivated in it are *dura*, *dagussa*, maize, *pania*, sesame and cotton.

The second zone is between the altitudes of 1800 and 2400 metres. Its climate is temperate and suited to the cultivation of the cereals of Europe. The crops special to this zone are corn crops, being a mixture of numerous kinds in which predominate hard corns, barley and oats (cereals which cannot be cultivated below an altitude of 2000 metres), taff, linen and some vegetables (beans, chick peas etc.). *Dura*, *dagussa*, maize, haricot beans and lentils are also cultivated in these two zones.

The third zone lies beyond the altitude of 2400 metres and is little represented in the colony. Its agricultural aptitudes do not differ much from those found in *Uina Dega* but it is better adapted to the exclusive culture of corn and barley.

If however the climatic-agricultural conditions of Erythrea be considered, from the point of view of scientific agriculture, on which the colony's future depends, it must be divided into six zones which we will call climatic-agricultural (2).

1) *Coastal and torrid zone, having rare and torrential rain.* — The land adapted to agriculture is very permeable and sandy. The climate is very dry and the vegetation very rare. There is a tacit convention to call this region desert, but in reality it has the characteristics of a desert only where the land is moving: the stable land has rather the characteristics of the steppe, its vegetation consisting of thorny and gramineous plants. No European practises agriculture and natives do so to a very limited extent, for ordinary agriculture is subject to too much uncertainty. It is however a mistake to think that the coastal region of the colony could not lend itself to agriculture. It has on the contrary conditions which allow of the formation of numerous oases, by means of the cultivation of date-trees — which might in itself be very remunerative — and the planting in their shade of cereals and plants having an industrial value, such as sorglios, *dura*, maize, henna and the plants suited to garden cultivation, especially *babina* — which is the authentic jute — and *melokia*, a valued succedeneum of jute.

2) *Zone of winter rains.* — Native agriculture is here habitually fairly

(1) 1 metre = 1.094 yards.

(2) This division follows on researches undertaken by Professor ISAIA BALDRATI, director of the experimental agricultural bureau of the colony of Erythrea, the results of which have appeared in excellent publications. Among these is the report on this subject read to the Italian Colonial Congress of Asmara in 1905.

extensive and some examples of European agriculture are not lacking. The natives confine themselves to growing maize, dura, sorgho sugar, and *newk* (1) in small quantities. The Europeans on the other hand have grown sesamum and are growing tobacco with excellent results. There is one example of native vegetable gardening. Successful experiments were made with cotton in 1902, and experience seems to show that the American varieties are to be preferred. In 1904 an attempt was made to grow Egyptian cotton but with negative results. It may be affirmed that precocious cottons of the *Upplan* type or rustic cottons of the Texas-Mexico, Abyssinia and India types can be profitably grown (2). The experience of the agricultural bureau has shown the possibility of cultivating with profit the arachide, the *agave sisalana*, the Alexandrine clover, several gramineous forage plants, taff, haricot beans of various kinds and *ambrevade*. On the whole this region may be considered to be peculiarly adapted to agriculture but its resources are still latent.

3) *Zone having two rainy seasons.* — This zone is well adapted to the growth of the products which commerce calls colonial products. The country is much varied and still largely wooded and its altitude varies from 400 to 2000 metres. Most of its area is uncultivated and used as pasture for their flocks by nomad shepherds. Outside the ordinary pastures the natives grow cotton. This plant grows luxuriantly but is sometimes damaged by rains while it is maturing. Almost all the valleys of this region are constantly watered by the springs or by the water which circulates in the beds of torrents. The farm of the Colonial Society is within this zone. Almond-trees, fig-trees and vines flourish in it. It includes a coffee plantation. Indigo grows wild abundantly and in quite important quantities. The experimental field of Filfil was established in this zone. As regards coffee-growing, it is well to note that it is possible here, and that on the eastern slopes, situated at an altitude of from 900 to 1700 metres, it promises excellent results. It is indispensable that a coffee-plantation should be shaded by non-deciduous trees. If irrigation be undertaken within the first two or three years success is certain, and even without irrigation the climate makes good results probable. The cinnamon tree, the sago tree and the carludovica for Panama hats also promise well, planted in excellent soil and well shaded, even if there be no irrigation. All the common crops already noticed as suited to the zone of winter rains are also certain to succeed, and dry rice, of the Manchuria and Mayotte varieties, should be added to them. India-rubber plants also promise well, especially the *Ficus elastica* and *Cresptostegia grandiflora*. There are further groves of wild orange and lemon trees and the yam grows wild. Several grantees have already devoted themselves to coffee-growing.

(1) *Newk* is grown beside corn and barley and gives an oil of excellent quality which is even fit for cooking. In Europe it is known as *niger*.

(2) In this connection see also *Allegato D.* in MARTINI's report: *Della coltura del cotone nell'Eritrea* by Aurelio Paoletti, *Relazioni speciali per i singoli prodotti coloniali* in *Atti del II. Congresso degli Italiani all'Estero*, Vol. I, 2nd part; and reports on this subject in *Atti del Congresso coloniale italiano in Asmara*, Vol. I. etc.

4) *Temperate zone having summer rains.* — This zone comprises the greatest part of the land of Asmara, Saganeiti and Adi Ugri, part of the land of Cheren and a considerable part of the territory of the Habab. It is the region most densely populated, both by natives and by Europeans, and consequently most widely cultivated. Fundamentally the crops are those of Europe. Some crops are already habitually and extensively cultivated — as *taff* wheat, barley, *neuk* and dry vegetables. Agriculture on the high Erythrean plateau neglects modern rules almost entirely : work is done without method ; there is no manuring or succession of crops. It was thought that it would be very difficult to establish a succession for the crops of the high plateau. The difficulty lay in the choice of a crop which would renew the soil and in the lack of vegetable fodder, but to-day it has been almost completely overcome. The most precocious varieties of the *dura*, potatoes, beans for sowing, some vegetable fodders, clover of Alexandria and lucerne grass can be used as being capable of renewing the soil. There is production not only for local consumption, but also for export in the case of linen, grain, *neuk*, colza, spices, potatoes and meal.

5) *Hot zone having summer rains.* — The most important and characteristic territory in this zone is that of Cheren. The irrigated cultivation of tropical fruits and vegetable-garden plants is here of considerable importance, thanks to the efforts made by Europeans and Sudanese. Ordinary native agriculture produces *dura*, bultuk, haricot beans, *neuk* and cotton. The lands of this zone might bear large crops for industrial purposes. In well formed soil the short-fibred American cottons give good results, without irrigation, even on hilly land. The arachis, the castor-oil plant, indigo and *agave sisalina* justify the best hopes entertained for them. *Manihot glazovii* or Ceara tobacco promises well and gives an excellent product.

6) *Zone having a torrid climate.* — There is little information as to the climate of this region. It seems however that usually it enjoys more rain than the high plateau, and moreover — since the temperature is always very high immediately after rain, its ordinary agriculture seems to be somewhat problematic. The population is little addicted to agriculture, and such as they do practise is faulty. Until a few years ago no ordinary agriculture was undertaken by Europeans. It is however in this region that the first attempts at growing cotton gave excellent results in 1902, and that moreover the Milanese firms obtained their vast grants for cotton-growing. It is however almost certain that the cultivation of long-fibred Egyptian cotton cannot give sure guarantees, if it be not helped by irrigation, a matter which presents no great difficulties since this region has rivers (Gasc, Sétit, Barca and their tributaries) having running water or layers of water above their beds and subject to floods. The future of this region depends therefore almost exclusively on the construction of works of irrigation which will allow its waters to serve agriculture (1). We will end this report with

(1) In this connection it is important also to notice the *Carte speciali dei terreni coltivati e dei terreni coltivabili ma non coltivati* (Special maps of cultivated lands and cultivable but uncultivated lands) of several commissions of Erythrea, published in MARTINI's report in 1913. Vol. IV 2nd part, established by M. CHECCHI, G. GIARDI and A. Mori (Sheets 6 bis to 11 bis).

the remark that in all Erythrea the Indian fig-tree grows well in the regions having an altitude of from 900 to 1000 metres or more. This is truly providential for the natives, for they can feed on the fruit for several months of the year and it exists in such quantities that some years ago its utilization for the manufacture of alcohol was even contemplated. The importance of the trees for fodder is no less: they feed the live stock as well as the natives. By the means of this tree a solution of the problem of reforesting districts of Erythrea might be found or at least sought. A policy of forestry might be placed on the basis of a well understood association of woodland and pastureland and a scientific economy with regard to the mountain territories.

B. — *Live Stock Farming.*

Of the different varieties of animals kept in Erythrea animals intended for meat, particularly cattle, have most interest, especially in view of their importation into Italy. Erythrea is rich in cattle; but unfortunately breeding is often absolutely primitive, for methods of selection are almost entirely ignored and are not applied. None of the possible improvements of the primitive systems are known and they have never been adopted. It should be added that no care is taken of the pastures, that there are no artificial prairies, and that it is the custom to harvest prairie grass for hay-making. Other and graver drawbacks exist with these. Until recently and for many years, from 1887 to 1903, the live stock of Erythrea was continually threatened and attacked by cattle disease. During this long period the matter was not even investigated; nothing was done against the scourge, except that shortly before 1903 there was an attempt at serum vaccination which however yielded neither theoretical nor practical results. It was indeed made empirically rather than scientifically. In order to find a remedy for the loss to which cattle farming was subject from epizooty, which destroyed the live stock of whole regions when it raged, S. E. Martini, then governor, took in 1903 a wise step. He charged a special mission to look into this most delicate question. The mission identified and studied the plague, established the distinction between it and the protozoic diseases with which it was confused, and laid down what were practical methods of fighting and preventing it.

The *Istituto siero-vaccinogeno* of Asmara was then founded for the preparation of the necessary sera and vaccines; men began to rely on really scientific criteria in vaccinating the beasts; and a serious, energetic and victorious campaign against the terrible disease was undertaken. The beneficent influence — economic, sanitary and political — of vaccination was disseminated everywhere. It may be affirmed that today the plague has

(1) Cf. in this connection A. OMODEO, V. PEGLION, G. VALENTI, *La Colonia Eritrea*. Rome, Bertero, 1913. volume I, section II, No. V. of the first part (Report of Professor Peglion), and in general all Professor PEGLION's report which forms the second section of this volume (pp. 135-215).

completely disappeared from Erythrea where almost all animals of the cattle tribe are rendered immune against it.

A corollary to the tenacious struggle was the considerable increase in the number of the cattle. According to the last census, made in 1905, there were then already 300,000 head of fully grown cattle.

The results of the census of the cattle of the colony of Erythrea are found in Martini's report of 1913 (Vol II. *Allegati* No. 67, pp. 987-1000) (1).

The census of 1905 supplied the following data :

	Camels	Horses	Cattle	Sheep
Census of 1898 . .	30,669	26,205	177,969	770,129
" " 1905 . .	46,933	29,789	295,717	736,132
Difference	+ 16,264	+ 3,584	117,748	- 33,997

If however it be remembered that on the occasion of this last census a good third of the animals were not declared by the natives — always averse from such declarations because they fear taxes and also perhaps because they are jealously reserved as regards their own property ; that these people consume no meat whatsoever ; and that in the five years after the census and until today the mortality from the plague, which once amounted to wholesale massacre rather than decimation, has ceased, because no more cases have occurred where serum vaccination is practised : if all these things be remembered it is obvious that the figure 300,000 must in reality much more than have doubled. The number of the heads of cattle must be at least 700,000, as was calculated in Erythrea in 1911. Such number is equivalent to one eighth of the total number of cattle in all Italy, found to be 6,198,861 at the last census. The production of sheep and goats is no less large and increases continually. These animals numbered in 1905 nearly a million and are now reasonably computed at more than two millions.

These data taken from the census of 1905 and from other and more recent information and researches — supplied by the district commissioners, the direction of civil affairs and the direction of the institute for the production of serum of Asmara — show that the number of cattle in Erythrea in relation to the population is proportionately far larger than in Italy. In Italy it is stated that there is one head of cattle for every six or seven inhabitants ; whereas in Erythrea, where before the war the population was about 400,000, there were then about two heads of cattle for each inhabitant.

If the number of cattle be compared to the area of Erythrea — 115,000 square kilometres — there are found to be six heads to every square kilometre, while in Italy there are 21.62 to every square kilometre.

(1) See also sheets XX and XXI of vol. IV. of the same report (*Carte speciali*) where is reported the distribution of wealth in live stock in the different districts of the colony (*Distribuzione della ricchezza in bestiame nelle varie regioni della colonia* and *Distribuzione del bestiame nelle varie regioni della colonia*).

That this figure should in Erythrea be six is the more remarkable because of the vast almost desert expanses of territory included in the total area, such as the deserts of Dancalia and the lands between the Gasc and the Setit.

The export of live oxen from Erythrea to Italy, of preserved meat in cases and of frozen meat or meat preserved by refrigeration presents a problem not yet solved, which will certainly be studied and rightly determined before long. The usefulness of such an enterprise is evident, in view of the prices in force in Erythrea, where a live ox weighing three quintals (1) does not cost more on the average, than 17 Maria Theresa thalers, that is about 32s.

§ 3. THE LAND REGIME.

In order well to understand the bearing of the recently adopted land policy, it is necessary to show the essential lines on which Ethiopian property was organized among the populations of the high plateau at the time of the Italian occupation.

In Abyssinia there is private property in land. The lands called *resti* are the freehold of the families of agriculturists. The etymology of the word *resti* implies occupation: it is derived from *rasseté* which means "to occupy" and marks the title by which the land was acquired.

The *resti* is not an individual property but one which belongs to a race, to a family: it is therefore a collective property.

Its collective organization does not however cut it off from being private and absolute. It can be transmitted by inheritance and alienated by sale and purchase, by exchange or by gift. Property in it is collective owing to the constitution of families which are today still patriarchal, and because of the method in which agriculture and shepherding are practised on it. Beasts are bred and raised in the open air and pastures and fallow-lands therefore remain common; and since cereals are cultivated in turn over large zones, fields are appropriated only temporarily. Hence the custom of distributing them by lot. Thus conditions are like those which Tacitus described as existing among the Germans (2) and which still subsist in the Apennines. The collective organization of private property, as determined by custom and imposed by economic needs, is not incapable of reformation but can be modified at will by those having rights in it. If therefore the transition were to be made tomorrow from the system of agriculture now in force to intensive culture, there would be nothing to prevent the individualization of property. The form of property can be modified as has happened before, but the element which ought to subsist is that of the cultivator's free ownership.

(1) 1 quintal = 220 lbs.

(2) *Arva per annos mutuant et superest ager.*

Besides *resti* there is another form of ownership, *gulti*. This tenure is feudal by origin and nature: the sovereign grants seignorial investiture with a certain holding to a person he favours. The *gulti* is therefore less representative of a right than of an office, a public charge, a delegation of the sovereign prerogative. The *gultegna* who has been invested with the *gulti* receives the tribute and pays it in whole or part to the sovereign; he assembles and commands the armed men in war, administers justice in the first instance and declares to the sovereign the causes as to which there may have been an appeal. Therefore while *resti* is economic occupation and the *restagna* an individual who occupies for his own profit, *gulti* is political occupation and the *gultegna* holds a public office. The *gultegna* retains for himself a part of the tribute (a tenth) and causes part of the lands of the *gulti* to be cultivated on his behalf as the appanage or salary of his post, a fact which in no way changes the nature of his occupation.

The sovereign's economic right and that which he delegates to the feudatories is chiefly the right to receive the tribute. The sovereign — the government — cannot reach the *gulti* except in fully determined cases. An absolute respect is thus shown to private property. These cases are those of 1) the total extinction of the *gultegna's* line; 2) his confiscation for rebellion or felony; 3) his failure to pay tribute; 4) his abandonment or voluntary renunciation by permanent absence of his land.

Finally we must recall that this organization of property, of which we have described the chief features, does not affect the vast regions inhabited by Mussulman and Pagan tribes, such as the districts of the Gasc, the Setit, the Barca, the Senhit, the Sahel, the Assaorta and the Dankalia, in which private property does not exist and the pastoral tribes have a customary right to pasture their animals freely on all of the territory not intended to be arable. In these districts property in the soil may really be considered to be vested in the State, so true is it that the peasants occupying lands, in order to grow cereals, have to pay a due or domainial tax which has no resemblance to a tribute.

Without going back to the political and historical vicissitudes, which characterized the first period of the Italian occupation of Erythrea and reached their last stage during the war against Abyssinia in 1895-1896, it is well to recall, as an explanation of and a commentary on the decree of 31 January 1909 organizing land in Erythrea, that in the period from 11 May 1893 to 12 July 1895 a series of decrees, promulgated in the colony, declared vast tracts of land to be domainial and reserved.

In view of the organization of property in Erythrea, as this has been briefly described, it is easy to understand how profoundly these decrees, which authorized the creation of a domain, disturbed the minds of the population of the high plateau. They contained an entirely new conception of the regulation of property, according to which the State had the right to claim lands for itself not only for objects of utility — a case which might within limits have been allowed by Abyssinian law — but also in order to appropriate these lands to colonization by white men, by the invading people. It was natural that violent confiscation, although in fact it affected only restricted

zones, should suffice to persuade the natives that they saw the beginning of a system which little by little would cause them to be entirely despoiled of their property in land.

On the other hand in the districts inhabited by Mussulman and Pagan tribes relatively vast territories could be subtracted from the domain held in common usufruct, for reasons already given, without seriously disturbing the rights or interests of the native tribes, who moreover populated these districts somewhat sparsely. The mistake in the decrees which formed a State domain was that they almost gave sanctity to the principle that a declaration of authority is necessary in order to establish the State's superior right to lands; whereas in Abyssinian law the sovereign or any tenant of the sovereign, that is the *gultegna*, can dispose of any lands not *resti*. Thus these decrees limited instead of extending the State's superior power, giving rise to the belief that it concerned only lands which had been declared part of the domain.

Thus this state of affairs caused in the colony much discontent which had to be eliminated if the population were to be pacified. Two measures might lead to this. A decree repeating those promulgated to form a State domain might be issued, the rights acquired by grantees being safeguarded, a serious step which might injure the government's prestige. Alternatively they might be modified so that they would become ineffective where they were held to be counter to the rights of the population and dangerous to public authority.

The modification to which the colony's government had recourse was as follows. Article 14 of the law of 24 May 1903 had provided that Acts prior to this law in date should not be enforced if they had not been included in the collection of Acts of Public Authority to be issued within two years, a term afterwards prorogued so that this collection was approved only by the royal decree of 30 December 1909. In this collection thirty decrees creating the State domain were not included, because they were not thought consistent with the land organization approved by the royal decree of 31 January 1909 or because they ran manifestly counter to the rights of the population. The decrees creating domain land which remained in force are applicable only to an area of no more than 15,500 hectares, admitting of cultivation, and to 200,000 hectares which were decreed in the first place to be attached to the State.

We come thus to the royal decree of 31 January 1909 which fixed the land organization of the colony of Erythrea (1).

A. — *Placing of lands at the State's Full Disposal*

The measure of placing lands at the State's full disposal is identified with the jurisdictional regulation of land, and was necessary to the introduction of a regime of agricultural grants according to precise and definite criteria.

(1) Supplement to the *Bollettino Ufficiale della Colonia Eritrea*, 25 July 1909, No. 28.

The jurisdictional regulation of the lands is the subject of Clause I. of the royal decree of 31 January 1909, which establishes that property in the colony's soil belongs to the Italian State, the rights being safeguarded which belong to the native population, as well as those which may belong to third parties as the result of a title emanating from the Italian government or recognized by it (Article 1). The rights of the native population to the land they enjoy in conformity with old local customs will be respected (Article 2). The public domain includes roads (railways and cart and caravan roads), the seashore, the ports, gulfs and beaches, military stations and fortresses, telegraph and telephone lines, and in general all property intended for public use (Article 3). The domain includes surface and subterranean watercourses, the chief dividing lines of waters and natural springs. Only a right to use the waters can be granted, and such use is always subject to the exigencies of public interest, in the measure of the property's need. Otherwise the waters belong to the domain. No works of deflecting or gathering the waters can be executed without the government's express authorization.

The colony's domain of which disposal may be made includes :

- a) lands which were recognized before the Italian occupation as belonging to earlier governments ;
- b) lands formerly belonging to native tribes, parts of tribes, races or families now extinct ;
- c) lands abandoned for more than three years by the native tribes, parts of tribes, races or families to which they belonged ;
- d) lands in the various circumstances in which according to native custom they devolve on the State ;
- e) lands which reached the condition of confiscated property ;
- b) woods and forests ;
- g) mines, quarries and salt-mines ;
- h) lands frequented by populations practising migratory pasturage, on which however the rights to pasturage and to the waters of such populations must always be respected within the limits prescribed by necessity ;
- i) the *gulti* (fiefs) constituted for offices, individuals, families or determined religious organizations, on which however the customary usufruct of fixed populations (1) must be respected within the limits prescribed by necessity ;
- j) in general all lands not comprised under Articles 2 and 3, those of which Article 1 treats being reserved.

The lands of which there is question in Article 2 may be resumed by the State, and assigned according to circumstances to the public domain or

(1) As regards this provision it should be noticed that if the *gulti* affect private property (*resti*) it does not add an inch of land to the domain. If however it affect lands which may really be disposed of, the authority to dispose of them is inactive since all such lands, whether *gulti* or not, belong to the domain. The only declaration that had to be made was that the rights of *gulti* were abolished, the *gulleghna* being thus deprived of all excuse for receiving any tithe, tribute or other feudal due.

the alienable lands, if they are destined for public use or for an occupation enabling works in the public interest. This may happen when it has by some means been established that military exigencies or those of the public interest render the lands necessary, when they are to be used to form or extend urban centres, or when they seem to be too extensive for the needs of the population using them, if the agricultural and agrarian customs of these be taken into account. In all these cases there is an equitable decision as to whether there is occasion to grant compensation. Its amount will always be fixed in accordance with the value of the use of which the occupiers have been deprived.

All provisions relative to these matters are made by a decree of the governor of the colony, issued after the arguments of those interested have been heard. There is no appeal against such decree.

Third parties holding rights in land, on the terms of Article 1, may be expropriated for a reason of public interest, legally recognized, if a just indemnity be paid to them. A decree of the governor declares the existence of such a reason and pronounces the sentence of expropriation. When an amicable settlement with the expropriate is impossible arbiters fix the indemnity (Article 8).

The lands in question in Article 2 are burdened with the payment of a land tax which may be lumped with the general tribute due from the native populations. The government of the colony may grant to natives of the colony enjoyment of lands of the domain, in proportion to their needs and in return for the payment of an annual due.

In Article 11 it is stated that lands and other real estate and rights relative thereto, in whatever manner they accrue to the domain, to citizens or to strangers or to anyone within the zone of building lands, are subject to the Italian jurisdictional regime, special provisions as to them being safeguarded.

The lands enjoyed by native populations by the terms of Article 2 are subject to the regime created by the various customs of the localities in which they are situated.

Article 13 establishes that except in the case of urban properties the creation and transmission of any right attaching to real estate are forbidden, as between natives and others.

Such are the provisions of the decree of 31 January 1909 regarding the jurisdictional regime of lands in Erythrea.

B. — *Agricultural Grants.*

Lands accruing to the alienable domain are intended for colonization, the customs and the needs of the native populations being safeguarded. The public authority grants to a certain person the right to enjoy certain real estate, for a stated object and period, in accordance with the provisions of Clause III of the decree in question. Analogously the rules relative to the property affect the grantee's rights in the real estate, in the absence of contrary provision.

The new organization establishes that the lands of the domain must always be alienable for the purpose of colonization, and prescribes that 2,000 hectares in the temperate zone of the high plateau be at once divided into lots in order to provide for small grants, which may be of agricultural land, of building sites, of land for industrial purposes, of mines or of land for special objects. It would take too long to examine all these types of grants. We will confine ourselves to those for the purposes of agriculture and industry, which merit our attention since they are within the scope of this article and are capable of most influence on the economic future of the colony. They may be said to form the pivot of the whole land regime.

Grants having an agricultural object may be made : a) to Italian cultivators themselves directly exploiting the land granted to them ; b) to Italian cultivators provided with capital and personally managing their farms ; c) to capitalists, societies of capitalists, legally constituted producers' societies or other corporate bodies recognized by the law and undertaking an agricultural enterprise.

Grants aiming at agriculture are of three kinds : two, corresponding to those mentioned under letters a and b, emanate from the governor ; the third, which corresponds to letter c from the royal power. Those of the first kind are absolutely free as regards a lot having the approximate area of 25 hectares or one or more parts of such lot. When grants are sought within a radius of less than five kilometres of an inhabited centre they cannot usually comprehend more than a quarter of a lot — 6.25 hectares. They can be granted to Italian settlers (1) who cultivate them personally and have a capital of at least 50 liras for each hectare they receive. At the end of five years they become the grantee's absolute property if he have fulfilled all conditions imposed on him. Grants of the second kind are made to Italian cultivators who prove that they possess a capital of 100 liras for each hectare they receive and who personally cultivate the land. The grant to them may not be of more than 200 hectares or for a longer period than thirty years. It is conditional on their payment of an annual due fixed by the governor every three years. If however the grantee fulfil all terms of the contract he may after five years become absolute owner of the granted land when he has paid a sum equivalent to the capital on which such annual due would be interest, at a rate previously fixed by the governor. Grants of the second kind cannot be made within a radius of less than ten kilometres of the chief urban centres.

While grants of the first and second kinds are made in the districts having a temperate climate, those of the third kind affect essentially lands having a torrid climate and are made to capitalists or societies of capitalists for the purposes of industrial agriculture. Usually they may not be of more than 10,000 hectares but exceptionally they may be of as much as 25,000 hectares. The term of the grants is fixed at ninety-nine years but they may be

(1) With the minister's special authorization grants of the first and second categories may even be made to foreigners.

prolonged for three terms of thirty years each. Land thus granted can never be converted into absolute property.

Further special grants of pasturage for the raising of live stock are made on lands not adapted to arable farming. They are for a term of ten years and may be renewed for other ten years, and they should be regarded as grants of the third kind.

The government of the colony may also alienate limited extents of territory, by agreement or auction, if the intention be to cultivate them.

Minute rules fix the obligations of grantees to the administration and third parties as well as the duties of the administration.

If the granted land or part thereof be not cultivated the grant lapses, totally or partially. Sub-letting is forbidden, and conditions have been determined for the payment of the due, the lapse and the revocation of the grant, and eventual expropriation. Grants may not be ceded to third parties without the administration's consent, and any such cession must affect all the land granted and such of its moveables and other accessories as serve the cultivation or other necessity of the property. Lands which are the subject of grants of the two first kinds and their accessories and easements may not be the object of a distraint for debts of any kind whatsoever. On such lands and their dependencies products in kind may not be pledged or sequestered unless to pay debts contracted before the grant was made and having some connection with the grant. Provisions necessary to the nourishment of the grantee and his family may not however be pledged in any case before the next harvest, nor may seeds needed for the coming season.

Lands the subject of grants of the two first kinds may not be burdened with mortgages.

On obtaining the administration's formal authority the grantees of lands may receive agricultural loans of capital, in the form and with the privileges established by the provisions in force in the kingdom of Italy, the capital to be used for useful and permanent improvements and for extraordinary works profitable to the granted land. Such loans may be secured by mortgages. In order that granted land may not be subdivided the organization limits the holder's power to bequeath it.

All grants are exempt from payment of dues on contracts and of taxes for ten years.

The administration may make agricultural loans in specie to grantees of the first kind for the purchase of live stock, implements and other stock, the construction of houses and rural buildings and other useful and permanent improvements. The administration, or eventually the Commissariat of Emigration of Rome, may — exceptionally and when the funds assigned to colonization permit — advance the sum needed for the journey from Italy to the colony, and for implements and household necessities, to three or more adult persons of one family, fitted to cultivate granted land and desirous of a grant of the first kind, but without the necessary capital. The capital necessary to installation, to the exploitation of the land and to nourishment until the first harvest has been garnered is also granted.

The administration may promote the constitution of *consortiums* for the execution and maintenance of hydraulic works, works of improvement and works connected with roads, if these be of recognised utility to the grantees, and also for the common purchase of machines, seeds and other such articles. The administration ought to participate in the consortium as it may increase the value of neighbouring domain lands which have not yet been granted.

When these works are also of general utility the administration should bear a proportionate part of the expense. When moreover it seems necessary the administration may form obligatory consortiums, bearing not less than a fifth share of the total cost of the labour or work undertaken.

The ordinance has also fixed the obligations of the government to new centres of colonization which may be formed.

The second chapter of Clause III (*Of Grants*) is concerned with *grants of land for building*, the third chapter with *grants for industrial objects*.

As regards the latter it should be noted that the governor makes special grants for the harvesting and utilization of products, whether growing wild or cultivated, which are called industrial, of land having an area not exceeding 10,000 hectares and for terms of no more than fifteen years. In other cases the grants are made by the central government.

Other grants may be made by the governor by contracts fixed as each case presents itself, for quarries, ovens and agricultural and industrial experiments. Woods may never be the object of grants, the colony's government being responsible for the sale of forest-trees and other woods according to the rules of the forest code (Chapter V. of the same clause : *Various Grants*).

Chapter IV. of the same clause deals at length with *mining grants*, which by their nature are outside the scope of this article.

Chapter VI. deals with the procedure of the *application for and the delivery of granted land*.

Clause IV. is concerned with the *cadaster*, divided into the *rural cadaster* which comprises all lands accruing to the domain except those included in the regulating plans, the *urban cadaster* which comprises the districts included in the plans regulating building in inhabited localities, and the *special cadaster* in which are entered lands in determined zones or localities on which particular rights exist or which present a particular interest, and in the case of which criteria and rules other than those prescribed by the rural and urban cadasters must be followed. This important clause is subdivided into four chapters, of which the first is concerned with the *institution of the cadaster*, the second with its *formation*, the third with its *publication* and the fourth with its *preservation*.

As regards the rural cadaster, which is the one most interesting to us, we would briefly notice that it is divided into three categories : a) lands of the high plateau within a radius of five kilometres of the urban centres of Asmara, Addi Ugri, Saganeiti, and other lands which the government may designate ; b) other lands within the temperate zone ; c) lands within the districts having a torrid climate. Within the lands comprised under letter a grants may

not, as has been said, comprise more than 6.25 hectares, that is a quarter of a lot.

It is established that a beginning is at once to be made in entering lands in the cadaster. Gradually they will be divided into lots of 25 hectares and each lot will be divided into four parts. Lands having a torrid climate are however to be registered in the cadaster as the occasions for granting them arise, without any division into lots.

The provisions regulating the organization of the cadaster are likewise precise. The organization is provided: *a*) by the cadaster's map of the colony, on which the various lands of interest to the cadaster are marked; *b*) by maps showing geographically the lands of the domain, their division into lots and their respective sections; *c*) by the census table which has a volume for each map, while each volume has a folio for each lot comprised in its map, giving the description, value and other particulars as to such lot, and its easements and rights; *d*) by a register establishing how and why a property belongs to a given owner, and any limitations of his right to dispose of it resultant on his personal disability, whether such be due to his minority, or to a suppression or prohibition of his ability; *e*) the table giving owners which forms the general list of the properties.

Rights in real estate and alienations of these are legally affirmed only by entry in the registers of the cadaster (Article 206).

The organization provides for all the conditions modifying entries in these registers. All such entries are made by the keeper of the cadaster with whom the map is deposited and who is answerable for it. The keeper is moreover responsible for losses which may be incurred through incomplete or erroneous entries.

We will not notice the temporary provisions of the ordinance, the term for which they were valid having already expired. We will merely add that the application of these rules, and of many others connected with the improvement of values in the colony and the examination of its economic resources, is entrusted to a special governmental directing body called the Direction of Colonization.

§ 4. COLONIZING EXPERIENCE.

In the beginning of 1907 the lands forming the subject of agricultural concessions to Europeans had a total area of 11,053 hectares.

The list annexed to Number 60 of the report on the colony of Erythrea presented to parliament in 1913 (vol. II.) gives all the data relative to the various concessions, their situation and extent and the object for which they were granted.

It does not include the early concessions in the plain granted before 1896 and abandoned for years by the grantees, nor some small farms, granted temporarily and not regularized. The latter have little importance.

These 11,053 hectares are divided as follows :

3,420.7204 hectares on the high plateau, populated by Abyssinians and recognized as part of the domain by a special governor's decree ;

5,339.8071 hectares in the plain, towards the sea and in the Mendri Bahari — the concessions in the plain adjoining the sea are part of the lands considered as belonging to the domain because populated by Mussulmans ;

2,292.6099 hectares in the interior of the colony in lands inhabited by Mussulman populations beyond the high plateau.

If they be considered in the light of the objects for which they were granted the concessions are distributed as follows :

113.9051 hectares. Special grants to missions, churches, convents and small farms of building sites, in localities in which, according to the provisions earlier in force, the grant of lands for building was not allowed.

1,330.1912 hectares granted to agricultural settlers, solely or chiefly occupied with agriculture.

1,199.8869 to settlers for whom agriculture was a secondary occupation, they being chiefly occupied by a trade.

8,409.1542 granted for purposes of industry to societies or firms having capital. This category includes the concessions fulfilling an industrial object because of their extent, or because special crops are grown in them or special systems adopted for their cultivation.

In the period from 1 November 1902 to December 1912, and according to results obtained by the Erythrean mission of A. Omodeo, V. Peglion and G. Valenti (1), 289 grants were made of a total extent of some 26,000 hectares, in which the large and sometimes indeterminate concessions for the cultivation of industrial crops were included. These concessions can be classified as follows according to their extent :

Area		Number of concessions
Less than 5 hectares		50
from 5 to 25 "	. . . . .	138
" 25 " 50 "	. . . . .	57
" 50 " 200 "	. . . . .	21
" 200 " 500 "	. . . . .	11
" 500 " 1000 "	. . . . .	5
More than" 1000		7
Total		289

(1) Rome, Bertero, 1913.

The following figures give the area of the concessions :

From 1 November 1902 to 1 November 1909 — still in force:	8,300 hectares
From 1 November 1909 to 31 December 1912 — still in force:	
1st kind	471 "
2nd "	1,061 "
Agricultural concessions of 3rd kind still in force on 31 December 1912 (approximately)	12,000 "
	21,832 "
Concessions granted from 1 November 1902 to 31 December 1912, revoked or renounced	3,313 "
Concessions granted for limited or expired terms. . .	573 "
	25,718 hectares

To these concessions there should be added three grants for the exploitation, the harvesting and the industrial use of products growing wild (fruits of the *dum* palm-tree, castor-oil grain, indiarubber and sesamum grain). Another concession was of pasturege over an area of 300 hectares.

The preceding data cannot, although taken from official documents, be considered as based on more than approximate calculations. It should also be noted that all grants are not now active, whether because grantees have failed to derive a profit, or because their recent date has not allowed the necessary steps to their occupation to be taken.

From other data, taken from an authorized source, it appears that until September 1915 there had been 102 grants of the first and second kinds of land held in free and absolute ownership, having a total area of 3,392.0969 hectares.

From an official source we learn also that concessions for quarries and ovens up to the end of 1915 numbered twenty-seven. Mining concessions and permits for searches and superficial borings up to 15 April 1916 numbered eight and the grantees included two syndicates, to one of whom were granted the goldmines of Cheren and to the other the peridot mines of the islands of Kad Ali.

Finally at the end of 1916 four permits were granted to gather the fruit of the *dum* palm-tree in the domanial woods of Barca.

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These results to which Italian colonization in Erythrea has hitherto attained and the numerous studies of which they have been the subject allow the statement that this colony cannot, and never can be, an outlet

for superfluous population. We have not space in which to examine the reasons for this statement. Some of them have however an importance shown by their mere enumeration, as for example the climate against which Europeans contend with too much difficulty, the relative density of the population by natives, and their attachment to the soil of the country.

Further Erythrea is not and never will be a purely farming colony, for a government who understand the interests of the mother country can never desire a colony which is only agricultural since in such there is bound eventually to be an opposition of interests. Erythrea should rather be utilized for economic purposes. To this end it is important that a profit should be drawn from all its various natural and social elements, and that it should be worked by Italian settlers associated with natives.

Looked at in this aspect the colony of Erythrea presents total assets of great importance. It is the human element which, in Erythrea as everywhere else, has a high value.

To solve this problem in relation to the whole rural economy of Erythrea we must follow the advice of Marchi, who stated that not substitutes for the native, but men, able to direct and make use of him, should be sought. It is on this principle that the present programme is founded.

RUSSIA.

THE RESULTS OF THE NEW AGRARIAN REFORM IN RUSSIA.

PART II.

§ 5. LAND ORGANIZATION ON NADIEL LANDS.

In the first part of this article (1) the organization of the enquiry, the farms as constituting its object and the twelve provinces in which it took place, were described in their general outlines. We wish now to examine more closely the results attained by the enquiry and to be able to establish the influence which the new forms of tenure and agriculture have had on the course and the development of peasant farming in Russia.

The average size of those of the investigated farms which were on *nadial* land was as follows in the twelve provinces :

	Settled <i>Nadial</i> Land ;	Unsettled <i>Nadial</i> Land & Bought Land	Total deciatines (2)
Houtor farms in which home- stead has been moved	12.5	1.2	13.7
Houtor farms in which home- stead has not been moved. . .	7.6	2.5	10.1
Otroub farms	12.3	2.0	14.3

If only the settled land of the unified holdings were taken into account, these average figures would in general correspond with that which expresses the average area of the farms settled on *nadial* land in all the forty-seven governments of European Russia in which the agrarian reform has been carried out, namely 10 deciatines [1,252,020 peasants' farms having a total area of 12,553,046 deciatines (3)]. The average area of peasant holdings

(1) *International Review of Agricultural Economics*, December 1916.

(2) 1 deciatine = 2 acres 2 roods 31.9555 poles.

(3) Отчетные свѣдѣнія о дѣятельности Землеустроительныхъ Комиссій на 1 января 1915 г. (*Memorial on the Activity of the Land Readjustment Commission up to 1 January 1916*). Published by the Department for the Tenure of State Land, 1915.

varies very notably in different provinces, from 3.1 deciatines in Krement-schug province (Government of Pultava) to 41.1 deciatines in Nikolajevsk province (Government of Samara).

Unification and the rendering contiguous of the parts of holdings has distinctly improved the condition of the land and the method of employing it, in comparison with the time before the land settlement. The fact that the land was so much cut up into parcels and that the parcels were scattered over the whole of the communal property, together with the distance at which they lay from the homesteads, often made it impossible, because unremunerative, to cultivate the strips which were furthest removed in spite of the very noticeable scarcity of land. After the land readjustment there was an unmistakable and total change in the position, a point which we illustrate in the following table.

The Distribution and Relative Distances of the Parcels of Holdings of Nadiel Land in the Different Provinces before and at the Time of the Settlement.

Farmers of nadiel land.		a = before the settlement b = at the time of settlement	Total in all the provinces
Having 1 strip of land	a	553	
" 2 " " "	b	3,751	
" 3 " " "	a	299	
" 4-5 " " "	b	6,931	
" 6-10 " " "	a	538	
" 11-20 " " "	b	2,515	
" 21-40 " " "	a	2,061	
" 41-60 " " "	b	908	
" 61-100 " " "	a	3,810	
" more than 100 strips of land	b	78	
Nadial farmers having the furthest removed strip at a distance from the homestead of	a	2,863	
0.0 versts (1)	b	—	
up to 0.25 "	a	2,288	
0.25 to 0.5 "	b	—	
0.5 " 1.0 "	a	973	
1 " 3 "	b	—	
3 " 5 "	a	622	
More than 5 "	b	—	
Houtor farmers having the furthest removed strip at a distance from the homestead of	a	212	
0.0 versts	b	—	
up to 0.25 "	a	235	
from 0.25 to 0.5 versts	b	3,715	
" 0.5 " 1.0 "	a	108	
" 1 " 3 "	b	776	
" 3 " 5 "	a	596	
More than 5 versts	b	1,062	
Houtor farmers having the furthest removed strip at a distance from the homestead of	a	2,089	
0.0 versts	b	1,513	
up to 0.25 "	a	4,093	
from 0.25 to 0.5 versts	b	2,980	
" 0.5 " 1.0 "	a	1,785	
" 1 " 3 "	b	1,731	
" 3 " 5 "	a	5,177	
More than 5 versts	b	2,406	

(1) 1 verst = 1166.332 yards.

This table gives us a deep insight into the whole agrarian revolution which is being accomplished in European Russia. Of the 14,183 farms on *nadiel* territory investigated the land was before the settlement held in one strip in only 553 (3.9 per cent.); and in 2,898 (20.4 per cent.) was divided into from two to five strips. The land of the other farms was scattered in six, twenty, forty or even more than a hundred strips. This parcelling of the land of a holding was especially marked in the provinces of Ostrov (Government of Pskov), Sitschevka (Government of Smolensk) and in Mologa (Government of Jaroslav), where farms having less than eleven separate parcels of land were not to be met with at all. Of the whole number of the farms investigated scientific agriculture was in consequence possible only in 24.3 per cent. After the settlement not a single farm remained which included more than ten separate parcels of land, and even such number was found only in few (0.6 per cent.); in 3,751 farms (26.4 per cent.) the land had been united into one piece to form *houlor* farms; in 48.9 per cent. of the whole number it had come to be divided into two; and in 17.7 per cent. into three pieces. It is to be noted moreover that the site of the homestead was reckoned as a separate piece. If this circumstance be taken into account it appears that almost half the total number of farms had had their land unified into one piece. If to these the *houlor* farms be added, 75.3 per cent. of the total number are found to have had their lands made contiguous. The chief evil of the conditions of peasant farming, the great parcelling of the land and the extent to which the parcels were scattered, has been if not entirely removed yet much reduced.

Certain rights, such as those in woodland, meadows and gardens, have not come within the scope of the unifying process because they have a particular value distinct from average values. Therefore it has been necessary to deliver land divided into from four to five parcels to 6.4 per cent. of the farms. There were also lands unfit to be tilled which could be used only for herding cattle. Such lands, which formed 10 per cent. of the whole area settled, were left as common meadows. This was the more necessary because at the beginning of the settlement the questions of fodder and of the use of grass pasture were not settled, and therefore a sharp break in the tenure of the huts standing on the summer meadows, which hitherto had been common property, was to be avoided if possible. Many peasants before the time of the enquiry of 1913 bought new land in addition to that awarded to them under the settlement, to which they thus added a second piece. The unification of such bought land with the *nadiel* land was first made possible by the law of 29 May (11 June) 1911 which had force from 15 (28) October. The bought land was until 1911 so regulated that it could not be used for the farms formed up to that date. This partly explains why in 21 per cent. of the *houlor* and *otroub* farms investigated there were altogether, besides the settled land, 26,863 deciatines not included in the unified farm land.

As regarded the remoteness of the peasants' lands from their homesteads remarkable results were, as appears from the table, also attained;

but this evil can be entirely cured only when the site of the homestead is removed to the *otroub*.

After the settlement 1,292 peasants (7.4 per cent.) (1) sold the entire holdings of *nadiel* land allotted to them, and 1,121 (6.4 per cent.) sold part thereof, such sales including altogether 2,413 farms having a total area of 18,766 deciatines. Among the causes for these sales is the circumstance that many peasants live outside their farms, being occupied as employees or labourers, and have long since lost all connection with the land; and that for others their holdings had become too small and they sold them in order to emigrate to Siberia or to buy larger holdings from the Land Bank or the crown. The ruin of some farms, whether as a result of bad harvests, cattle disease, the lack of labour in a family or other cause, was also instrumental in bringing about sales. The average price of the land was raised by almost 50 per cent. after the settlement.

In Siberia and European Russia 22,022 deciatines were bought by the peasants after the settlement, that is more than the 18,766 deciatines which they sold. This is proof that the economic basis of the newly formed peasants' farms is firm and solid, and that even in the initiatory period, when farming had to be fundamentally reorganized, most of the peasants were able to increase the area and importance of their farms by buying land. The number of farmers who took land on lease after the settlement increased in all the provinces except Mologa. The average area of leasehold land belonging to a farm decreased however; and so did also the number of lessees, even considered in relation to the decline of the average area of leasehold land. Rents rose very notably after the settlement. The question of the subdivision of farms among heirs received very particular attention at the enquiry. The number of farms thus subdivided — 323 (2.2 per cent.) — was small and 752 farms had been formed from them. The position of these resultant farms was in general not prosperous. In order to provide in the future against the formation of such economically weak and unprofitable peasants' farms the Chief Office of Land Organization and Agriculture has placed before the Duma a scheme for a law, entitled "Measures for Lessening the Subdivision of the Lands of Small Farms formed with State Aid".

§ 6. LAND SETTLEMENT ON THE LANDS OF THE PEASANTS' LAND BANK AND ON CROWN LANDS.

Land settlement is generally far easier on lands acquired from the Peasants' Land Bank or the crown than on *nadiel* land. In the case of the former it is not necessary, as in the work of unifying strips of land of differing values on *nadiel* land, to give when measuring and allotting any attention to the present and past interests of the villagers. Only considerations of a technical kind have to be taken into account when the crown and bank land are

(1) Eight farms which arose as a consequence of subdivision by inheritance are included.

allotted — as that of contriving such a favourable division of the *houtor* and *otroub* farms as will bring them nearest to a square form, and of providing a water supply and rights of way. A valuation is undertaken in this case with a view to establishing only the selling price; and land settlement can therefore be brought to a more advanced stage of completeness.

The enquiry covered, as has already been said, 4,832 farms on bank and crown lands, 2,566 of them being settlements on *houtor* and *otroub* land and 2,276 *otroub* farms of which the owners had remained on their *nadiel* lands. This property was taken over from the peasants by the following stages.

Year of taking land over	1907-08	1909	1910	1911	Total
Number of farms	1,090	1,851	1,460	431	4,832
Percentage of their whole number	22.6	38.3	30.2	8.9	100

Thus at the time of the enquiry nearly 90 per cent. (22.6 + 38.3 + 30.2) of all farms had enjoyed the new conditions for more than three years, and almost 60.6 (22.6 + 38.3) for four years and more. The farms altogether comprised 77.7 per cent. of arable land, 6.4 per cent. of meadowland and 15.9 per cent. of land otherwise employed.

Holders to the number of 3,373, or 69.8 per cent. of the whole number, were allotted land held in one piece; 1,377 or 28.5 per cent. received land divided into two pieces, and 82 or 1.7 per cent. land divided into three or more pieces (1). Thus in settling these properties it was not always found possible to give all the peasants land held in one piece; for the existing division of woods and meadows necessitated sometimes the allotment of a second or a third strip to a farm. In addition 37 per cent. of the peasant buyers received a common meadow which comprised 11.7 per cent. of the land bought.

The average size of the bought pieces of land was 20 deciatines, their area varying from 8.3 deciatines in Bogoduchov province to 29.4 deciatines in Nikolajevsk. These farms are thus twice as large as those on *nadiel* land, a fact which must of course be carefully kept in mind if a comparison between the farms of the two classes be made.

The area of the leaseholds of farmers was equivalent to 32.3 per cent. of their holdings of crown and bank lands, and therefore stood to these in much the same proportion as did the leaseholds of the other peasant holders to their *nadiel* land, the percentage in the latter case being 34.7 per cent. (29.6 per cent. before the land settlement). Even in a province so rich in land as Nikolajevsk, where the average holding attached to a homestead is

(1) The site of the homestead was when separated from the land of the settlement reckoned as a separate strip.

of 29.4 deciatines, there are leaseholds. The circumstance cannot be ascribed to scarcity of land but to the cause which has given rise to leaseholds on *nadiel* lands, namely the endeavour of the peasants to enlarge their farms, to extend their property.

§ 7. FINANCIAL SUPPORT OF THE PEASANTS UNDER THE LAND SETTLEMENT.

When the land was settled money was assured to the peasants, both for removing their farm buildings and for carrying out the simple improvements prescribed, in the form either of a loan or a gift. The amounts of the sums thus expended on the farms on *nadiel* land and on bank and State domains within each province are shown in the following table :

Financial Support given to the Population when the Land was Settled.

a) ON NADIEL LAND.		Total for all prov.
No. of farmers moving their homesteads		3,781
They received from Credit of the Land Settlement:		
Loans { No.		1,522
{ Amount in roubles (1)		165,944
Gifts. { No.		140
{ Amount in roubles		8,177
No. of farmers not moving their homesteads		11,154
They received from the Credit of the Land Settlement:		
Loans { No.		908
{ Amount in roubles		81,022
Gifts. { No.		162
{ Amount in roubles		5,861

b) ON LANDS OF THE BANK AND STATE DOMAINS.

To those moving their homesteads the Land Settlement Credit paid:	
Loans	1,805
Gifts	149
To those not moving their homesteads the Land Settlement Credit paid:	
Loans	94
Gifts	2
Total of:	
Loans in roubles	231,288
Gifts in roubles	9,097

(1) 1 rouble of 100 kopecks = about 2s. 1 ½d. at par.

As this table shows, the peasants who had bought lands from the Peasants' Land Bank or the administration of the State domains were more generously supported with money than those on the *nadiel* land; but on the other hand the former were obliged when they took over their lots to pay in advance out of their own means 10 per cent. of the purchase price, and 15 per cent. of them were in consequence left destitute of possessions and therefore much in need of help. On the whole financial support was extended to a relatively small number of the peasants and the number of gifts made was too trifling. The average sum of money received was 105 roubles a homestead, against which must be set the average cost of moving a homestead, setting up buildings and carrying out improvements, namely 238 roubles a homestead. Thus the giving of financial support was in no sense a philanthropic enterprise and could not act as a bait to the peasants to fall in with the reforms of the Land Readjustment Commission.

§ 8. THE ECONOMIC POSITION OF THE NEW PEASANTS' HOLDINGS IN SEVERALTY.

In order to understand the economic position of the new farms held in severalty the investigators of these made a great point of establishing, by searching questions and tests, the value of the improvements made by the peasants on their holdings after the settlement, and that of their buildings, their cattle and all their possessions. A comparison thus became possible between the position of the farms before and after the settlement. It has appeared in general that in the farms situated on lands of the Land Bank and the State domains the value of improvements, buildings and live and other stock is, in comparison with that existing before the land settlement — that is before the pieces of land were bought — distinctly higher than it is in the case of the farms in severalty on *nadiel* land. This is not surprising since we know that the farms of the first category are twice as large as those of the second (§ 6), and are moreover of earlier origin and held on a peculiar basis. A comparison of the economic positions of the two kinds of farms is possible only under reservation, and should be made not as between farms but as between areas.

a) *Improvements and Buildings.*

With the remodelling of farms and tenures and the settlement of the land, what may be called the psychological relation of the peasant to his holding alters. The awakened sense of ownership gives rise to the wish to employ the land economically and make the smallest plot as productive as possible. Marshes are drained, stony soil is rendered tillable, land overgrown with bushes is cleared. Although when the enquiry was made most of the farms had enjoyed the new conditions only for from three to four years, more than a third of the farmers in severalty of *nadiel* land, 75 per cent.

of them being *houtor* farmers, had made most important improvements. The value of these was placed at 288,057 roubles, an average of 47 roubles 33 kopecks a farm, the average in the different districts varying from 11 roubles 74 kopecks (Krementschug) to 140 roubles 70 kopecks (Nikolajevsk). The average area on which improvements have been made by *houtor* farmers is larger by 44.1 per cent. than that which *otroub* farmers have improved.

On the lands of the bank and the State domains expenditure on improvements after the purchase of the land was ten times greater than it had been in the case of the earlier holders. The average expenditure on improvements on a farm, as well as the number of farmers undertaking improvements, were on these properties larger than the corresponding averages for *nadiel* lands.

As regards buildings, not only the number of dwellings but also that of stables, byres and barns has grown; and this, as the report adds, points to the conclusion that the number of *houtor* farms grew even after the settlement, because the *otroub* farmers removed their farm building from the village area to their newly settled lots. The number of farmers having no farm buildings has been almost halved: it has sunk from 404 to 210. The value of the buildings rose on the investigated farms on *nadiel* land from 7,398,449 roubles to 9,224,963 roubles, that is by 1,826,514 roubles or 24.6 per cent.; on the farms on lands of the Peasants' Land Bank and the State domains — according to the estimate of the possessors themselves — from 2,136,159 roubles to 3,098,866 roubles, that is by 962,707 roubles or 45.1 per cent.

b) *Live and Other Stock.*

Before the settlement the land was so split up that the employment of modern agricultural machinery was not only economically unprofitable but also technically impossible. This condition altered rapidly after the strips of land had been united, and the change from the three-field system to that of intensive agriculture accomplished. The primitive implements — the plough-hatchets, the wooden harrows — have been superseded; new machines have been bought to an important extent, such as sowing, mowing, winnowing and threshing machines. This is especially the case in *houtor* farms, on some of which the value of all the stock other than live stock is double what it was originally. The employment of agricultural machines has been extended by the dépôts of zemstvos and the government as well as by private owners. The corn-winnowing and sorting machines have especially increased in number in the north and north west provinces; the sowing, mowing and hay-harvesting machines in those of the south and south east. The total value of the stock other than live stock rose in the 17,567 farms on *nadiel* land from 836,642 roubles to 1,174,327 roubles, that is by 40.4 per cent.; in the farms on lands of the bank and the State domains it rose from 382,584 roubles to 779,558 roubles, that is it was nearly doubled.

The live stock increased absolutely on all the farms investigated, if they be taken together, but not in the same measure as the other stock. As regards

live stock the proportionate increase or decrease differs very much in the two classes of farms : on the lands of the Peasants' Land Bank and the State domains, where the newly bought land had to be cultivated, the number of animals increased throughout on every farm ; but in the farms on *nadiel* land, especially in the first years, the average number for each farm was slightly diminished. The number of the horses was reduced from 24,507 to 23,589, that is by 3.7 per cent ; that of the cows from 21,845 to 21,607, that is by 1.1 per cent.; and the number of the sheep from 46,720 to 30,384, that is by 35 per cent.

The diminution of live stock is to be ascribed to the fact that, when removals took place, more or less spontaneously, to the self-contained farms held in severalty, the earlier common meadows were in most cases done away with, and the stall-feeding of live stock is as yet not practised to a compensatory extent. The state of affairs is to be regarded however as only transitory ; for as soon as all the elements existing in a farm have been adjusted to the new factors affecting them, an increase in the number of live stock occurs. This is noticeably so in the case of sheep, as to which to accept the statement that in the new conditions of peasant farming their number dwindles would be unjustifiable or at least premature. The investigations made at the Pultava experimental station have discovered, in this connection, that sheep herded on meadows and fed in stalls are almost equally profitable, and that the reduction in the number of sheep is transitory. At the beginning of the land settlement, when farms were being reorganized, the keeping of sheep diminished owing to the lack of meadows ; but as the farm adjusted itself to the new conditions sheep, pasturing near the homestead and fed at night with some summer grass and grass of the steppes, appeared again (1).

As regards cattle generally the decrease in their number is throughout very small, especially if a calculation be based on a given area of land instead of a single farm. It is then discovered that on every 100 deciatines of all the land, whether newly settled or not, the following average number of live stock is found.

	Horses	Cows	Young stock	Pigs
In farms on <i>nadiel</i> land	11.7	10.7	7.1	13.1
" " " bank " & State domains	11.3	7.6	5.7	6.9

It appears thus that, when the calculation is made for a given area, the *nadiel* farms, although generally only half as large as those on bank lands and State domains, are more richly provided with live stock. This relation between the two classes of farms is particularly clear when the amount of live stock held on farms of the two categories in single provinces is compared, as in the following tables.

(1) *Review of Agrarian Assistance given in the Districts of the Land Organisation in the Government of Pultava in 1914.* Published by the Government Zemstvos of Pultava, 1915. p. 45.

Farms on Nadiel Land.

Provinces	Average area of investigated farms in deciatines	On 100 deciatines			
		Draught horses	Cows	Young Stock	Pigs
1. Nikolajevsk	48.2	6.1	3.5	2.3	2.5
2. Krasnoufimsk	23.2	11.8	9.3	6.5	4.7
3. Berdjansk	16.5	15.4	7.4	4.8	5.6
4. Ostrov	14.7	8.8	21.8	8.0	11.7
5. Rschev	13.8	12.2	14.1	6.3	7.8
6. Trokiki	11.7	13.7	18.3	13.1	37.2
7. Sitschevka	11.3	13.9	12.7	6.6	10.7
8. Mologa	10.7	8.8	12.9	6.8	4.3
9. Orël	8.4	11.1	11.3	6.5	9.3
10. Bogoduchov	7.8	14.2	11.2	9.9	18.9
11. Kremenschug	5.9	17.8	12.6	12.7	18.4
Average . . .	13.8	11.7	10.7	7.1	13.1

Farms on Lands of the Agrarian Bank and State Domains.

1. Nikolajevsk	38.2	11.7	5.2	4.1	4.2
2. Krasnoufimsk	31.1	8.2	6.6	4.6	3.4
3. Ostrov	22.4	6.7	15.5	7.4	8.9
4. Berdjansk	21.7	12.0	5.6	3.3	7.4
5. Mologa	20.0	6.7	12.7	6.7	8.4
6. Orël	15.7	12.8	8.9	6.6	10.2
7. Jepifany	15.3	14.2	7.7	6.5	8.6
8. Kremenschug	12.3	10.7	9.7	10.4	14.4
9. Bogoduchov	11.3	19.5	10.8	9.4	16.6
Average . . .	21.9	11.3	7.6	5.7	6.9

If these two tables be compared it appears that the average number of cattle kept per 100 deciatines is in most provinces rather higher on *nadiel* farms than on those on bank and crown lands. In four provinces — Mologa,

Ostrov, Rschev and Trokki — the number of cows per 100 deciatines is higher in both classes of farms than that of horses, a circumstance closely connected with the whole method of farming in these provinces, namely with the improved field system, especially with a view to live stock and dairy farming, and with the more extensive cultivation of grass for fodder. In the other provinces however corn growing prevails and this naturally causes draught animals to have most importance among the live stock. For the rest, in every province in which owing to bad harvests or general causes there has been a reduction of live-stock, such reduction is relatively least noticeable in the newly formed farms held in severalty, which circumstance is a clear sign of the staying power of these and their fitness to bear burdens.

§ 9. AGRICULTURAL ASSISTANCE AND THE EXTENSION OF CO-OPERATION.

Agricultural assistance was afforded to the newly formed farms in the provinces of Ostrov, Sitschevka, Mologa, Orël, Berdjansk and Krementschug by the zemstvos; in the provinces of Trokki, Rschev, Jepifany, Bogoduchov and Krasnoufimsk by the government; and in that of Nikolajevsk by the zemstvo and the government. At first the help given took such forms as demonstrations, adapted to needs; and instruction given to the peasants by means of the organization of model farms and experimental cultures; the foundation of stations for cleaning seeds, warehouses for machines and stud farms; the holding of lectures and courses, and the arrangement of cattle shows. It was sought to provide the peasants with the knowledge necessary to farming. Later, as the staff of agriculturists increased, it became possible to undertake individual instruction, to know the peculiarities of every single farm and direct it to that path by which it could secure technical advantages and be economically profitable. Out of the system of provincial agricultural assistance arose the so called *Zevier* agricultural organization, which very much narrows the activities of the province and therefore gives more attention to single farms. If hitherto corn growing had dominated among forms of agriculture and had been the general object of farming, so that the prosperity of peasant farmers depended on a single factor, it was the task of the organization of the local experts to introduce other forms of agriculture, so that the peasants' income might depend upon several factors, and when one of these failed they might derive compensation from another.

The type and the amount of expert help afforded in the twelve districts investigated appears from the following table :

Name of District	Date of Introduction of Organization of Agricultural Experts	No. of Agricultural Experts	The Experts included		No. of Farming Leaders and Instructors	No. of Model Cultures	No. of Experimental Farms	No. of Stud Stations	No. of Corn-cutting and Seed-cleaning Machines Installed	Other Measures
			State Experts	Zemstvo Experts						
1. Berdjansk . .	1911	6	—	6	9	17	1,259	54	33	{ 7 Dairy Stations. 11 Garden "
2. Bogoduchov .	1911	8	2	6	8	42	272	17	79	
3. Jepifany . . .	1911	2	2	—	6	—	966	5	51	
4. Krasnoufimsk.	1912	8	2	6	15	10	550	9	20	{ 1 Station for Support of Farming. 8 Pig Breeding Stations.
5. Kremmentschug	1910	7	—	7	9	45	765	65	37	
6. Mologa . . .	1910	5	—	5	5	—	260	10	35	
7. Nikolajevsk. .	1910	15	4	11	41	34	208	3	127	2 Stations for Poultry Breeding.
8. Orël	1911	3	2	1	15	10	212	26	40	
9. Ostrov	1910	5	—	5	9	—	170	96	2	
10. Rschev . . .	1911	5	2	3	12	—	170	9	12	{ 14 Stations for Pig Breeding. 15 " " Sheep "
11. Selschevka . .	1911	5	4	1	6	—	250	10	51	
12. Trotki	1910	3	3	—	10	87	16	49	37	

As the table shows, the organization of the local agricultural experts was of much later origin than the settlement of the self-contained peasants' farms. This organization extends its support not only to the newly formed farms but also to all farms within its circle of activity, and its help thus reaches the whole rural population. For this reason the whole number of newly formed farms which at the time of the enquiry had had support from the agricultural experts, in the form of advice or more practically, was not large, as appears from the following table :

The Absolute and Relative Number of the Newly Formed Farms on which the Local Agricultural Experts gave Instruction.

Name of Province	Total Number of Investigated Farms except those as to which facts were incomplete	Number of these Farms as to which the Experts advised	Percentage of whole Number of Farms
1. Berdjansk	1,691	225	13.3
2. Bogoduchov	3,658	639	17.5
3. Jepifany	1,509	971	64.3
4. Krasnoufimsk	1,314	618	47.0
5. Krementschug	2,137	974	45.6
6. Mologa	337	228	67.7
7. Nikolajevsk	1,891	426	22.5
8. Orël	1,095	638	58.3
9. Ostrov	1,335	400	30.0
10. Rschev	658	311	47.3
11. Sitschevka	1,373	248	18.1
12. Trokki	2,769	1,137	41.1
Total . . .	19,767	6,815	34.5

Thus only 34.5 per cent. of the newly formed farms have been able to draw profit from the organization of local experts ; all the others were directed to the common measures undertaken in the interest of all the rural population — the model farms, the experimental cultures and the others. The organization has been universally valuable to the rural districts, and has much promoted co-operation, in the form of agricultural co-operative societies, dairy co-operative credit societies, consumers' unions and so forth. The number of peasant farmers adhering to co-operative unions rose very notably after the land settlement, especially in the case of agricultural societies, for the members of these who were *houlor* and *otroub* farmers was almost multiplied by five.

The following table shows the development of these relations before and at the time of the enquiry, and on *nadiel* lands and lands of the bank and the domains.

Number of Farmer Members of Co-operative Unions	Date of fact (1)	On Nadiel Land	On Lands of the Bank and State Domains
All Co-operative Unions	$\left\{ \begin{array}{l} a \\ b \end{array} \right.$	$\left\{ \begin{array}{l} 2,677 \\ 6,291 \end{array} \right.$	$\left\{ \begin{array}{l} 561 \\ 2,665 \end{array} \right.$
Co-operative Credit Unions	$\left\{ \begin{array}{l} a \\ b \end{array} \right.$	$\left\{ \begin{array}{l} 2,520 \\ 6,023 \end{array} \right.$	$\left\{ \begin{array}{l} 540 \\ 2,610 \end{array} \right.$
Agricultural Societies	$\left\{ \begin{array}{l} a \\ b \end{array} \right.$	$\left\{ \begin{array}{l} 95 \\ 464 \end{array} \right.$	$\left\{ \begin{array}{l} 29 \\ 133 \end{array} \right.$
Other Co-operative Unions	$\left\{ \begin{array}{l} a \\ b \end{array} \right.$	$\left\{ \begin{array}{l} 159 \\ 349 \end{array} \right.$	$\left\{ \begin{array}{l} 23 \\ 108 \end{array} \right.$

§ 10. AGRICULTURE IN THE NEWLY FORMED PEASANTS' FARMS.

The agrarian reform has freed peasant farming from the fetters of the *obstschina* of the common land. The *Flurzwang* and its consequences — simultaneous preparation of the soil, sowing, harvesting and other operations on the part of all holders — no longer limit peasant farming, which has come to develop more freely and to use fully all the available land and labour. This process of adjusting the newly settled peasants' farms to natural and agricultural factors is now in full swing but has of course not yet come to an end in its most important respects. Yet already at the time of the enquiry the following general conclusions could be made as to agriculture.

The three-field system, formerly universally prevalent, no longer dominates agriculture but begins to give place to other and more perfect systems. In the north western district the change is in the direction of a production of the raw materials of manufacture, flax being the most important crop and one which can be well marketed. Rschev is an example of a district in which the three-field is being exchanged for a six-field system, the following being the order of succession: (1) fallow land is manured;

(1) a = before the enquiry; b = at the time of the enquiry.

(2) rye crop followed by sowing of clover; (3) clover of the first year; (4) clover of the second year; (5) flax, and (6) oats. If the market for flax be good, flax also forms the sixth crop. This system reduces by half the extent of land which lies fallow under the three-field system, and moreover two divisions are planted with fodder grasses (clover) which, as is well known, enrich the soil with nitrogen. In other districts — as in Krasnoufinsk, Orël and to some extent in Jepifany — the improvement of agriculture is directed principally towards growing fodder grasses. A whole series of transitory systems, intervening between three-field and more-field farming, is to be met with everywhere. As yet they have not crystallized but they have broken away from the rigidity of three-field farming.

In the southern districts, remarkable for black earth, wheat growing outweighs all other forms of agriculture. The fertility of the soil makes manuring almost superfluous. The improvement in agriculture has here especially affected the technique of farming: fields are ploughed more often, stubble is turned, sowing is done by machinery, fallow land, whether black earth, virgin or previously cultivated soil, is brought under cultivation, and so forth. This leads too to retention of humidity in the soil, a matter which in the south is very important. New crops are also planted, as vetch, clover, lucerne grass. The three-field system thus loses ground of necessity. In the district of Bogoduchov, for example, under the influence of the model fields, the following four-field system has been introduced: (1) virgin, clean and manured fallow land sown with vetch as situation allows; (2) winter rye slowly replaced by winter wheat; (3) millet, buck-wheat, potatoes, beet-root or beans, that is plants requiring a medium amount of labour; (4) summer barley. The crops on the third of these divisions — the hoed crops — take up on an average 12 per cent. of the whole cultivated area, on *honor* farms 18 per cent.

On farms on *nadiel* land the transition to better agricultural systems is on the whole more marked than on those on lands of the Peasants' Agrarian Bank and the crown. That the better methods of distributing crops and employing the soil have already had good results, and that the yield of the newly settled peasants' farms has largely increased, appear from the following table, in which comparisons are made in the case of crops of six kinds for the years 1912 and 1913.

The Yields in the Chief Grain Crops and Potatoes.

		Average yield of deciatine in puds (1)	
		1912	1913
Rye	{ Nadiel farms	54.0	54.4
	{ Bank lands	66.5	65.6
	{ Lands of village communities. . .	50.1	51.2
	{ Lands of estate holders	58.9	63.6
Winter Wheat. .	{ Nadiel farms	54.4	82.6
	{ Bank lands	45.2	73.0
	{ Lands of village communities. . .	62.6	63.3
	{ Lands of estate holders	65.9	78.9
Summer Wheat .	{ Nadiel farms	49.8	55.6
	{ Bank lands	57.6	61.8
	{ Lands of village communities. . .	41.0	51.0
	{ Land of estate holders.	41.6	47.6
Oats	{ Nadiel farms	68.1	72.8
	{ Bank lands	77.6	75.6
	{ Lands of village communities. . .	55.9	59.9
	{ Lands of estate holders	60.1	69.3
Barley	{ Nadiel farms	65.9	66.1
	{ Bank lands	67.5	73.4
	{ Lands of village communities. . .	53.7	60.4
	{ Lands of estate holders	59.0	68.1
Potatoes	{ Nadiel farms	623.4	570.1
	{ Bank lands	551.4	440.9
	{ Lands of village communities. . .	451.8	421.0
	{ Lands of estate holders	451.8	570.6

That the average yield of the lands of the Land Bank and the crown is somewhat higher than that of the *nadiel* lands is to be explained by the fact that most of the investigated farms on lands of the former category lie in the black earth area, and are moreover of earlier foundation, while their soil has been less exhausted by tillage and farming than that of those on *nadiel* land. In general the differences in yield are not very important, for in the course of so short a period as three or four years the yielding capacity of the soil on the newly settled peasant farms could not be fundamentally altered. It is however a great gain if it can be established that within this short period the yielding capacity of the self-contained farms held in severalty has surpassed that of the land still held by the peasants in common.

(1) 1 pud = 40 lbs.

CONCLUSION.

The conclusions as to which the enquiry into the unified peasants' farms has led are chiefly the following :

(1) More than three quarters of the investigated farms on *nadiel* land received their parcels of land (the site of the homestead being left out of account) in a single self-contained piece after the land settlement. On the other hand before the settlement more than three quarters of the farms had their land distributed in at least six strips, and generally in thirty, forty, or even a hundred.

(2) Half the peasant farmers have been allotted *nadiel* lands distant by hardly a verst from their homesteads. But before the land settlement three quarters of them held land more than a verst distant from their homesteads, and a third of them land five versts or more thence distant.

(3) The land settlement was most advantageous to the average peasants' farms, those to which small or medium-sized holdings attached. The extent of land provided for the newly settled *nadiel* farms was approximately equal to that locally normal, except in two districts where it was more extensive and in three where it was noticeably less so. In general *otroub* farmers are somewhat better provided with land than *houtor* farmers.

(4) Of the 7.7 per cent. of the farmers who had given up their farms on the newly settled land, 5.1 per cent. were those who, instead of the land they sold, had acquired a larger piece from the Peasants' Land Bank, the crown or private owners; others had emigrated to Siberia, and others had made the chief part of their income as employees or traders. Only 2.3 per cent. sold the land allotted to them without having, at the time of the enquiry, bought other land or provided for themselves by some trade.

(5) Of the newly settled farms 2.2 per cent. were subdivided among members of families, as the result of inheritance, after the settlement.

(6) More than 40 per cent. of the peasants have carried out on their lands improvements of which the average value is 53 roubles a farm (about 47 roubles on farms on *nadiel* lands and some 70 roubles on those on bank lands).

(7) After the land settlement the total value of the buildings and the possessions on the newly formed peasants' farms rose by 27.7 per cent.

(8) About a fourth of the farmers were helped by the crown after the settlement with money. Of them 2.3 per cent. had the money granted to them without obligation to repay it. The average amount of the grant was 105 roubles a farm, or 44 per cent. of the average cost of removing buildings to new sites and carrying out improvements.

(9) The number of the peasants who became members of co-operative unions was, after the settlement, more than doubled among the *otroub* farmers and quadrupled among the *houtor* farmers.

(10) The number of farms on which fodder was grown and a succession of crops maintained over several years was quadrupled after the land settlement.

(11) The harvest yield in 1912 and 1913 was in the overwhelming majority of cases higher on the newly settled farms than on those still in common ownership, and still burdened with the system by which a holding was made up of scattered parcels. Not infrequently it was higher on the newly settled farms than on the estates of private owners.

We repeat that when these results are considered it should always be borne in mind that the newly formed peasants' self-contained farms, enjoying conditions created by the land settlement, had at the time of the enquiry existed only for three or four years. Their reorganization, the re-modelling of all farming on them, had only just begun; and it had been necessary for the farmers to spend much time, labour and money in order to make them fit for agricultural operations as quickly as possible. As regards production the first years were of course the least fruitful: they were the least favourable period in the existence of the farms. And although agronomic enterprise on the part of both the government and the zemstvos helped the peasants in their farming, both with advice and more practically, the peasants nevertheless, since help of this kind became available comparatively late, depended most on themselves and on their own experience and initiative. Final conclusions could not therefore be made as to the position of the farms: the enquiry could only indicate their possible developments and establish their tendencies. For these ends the available material was sufficiently enlightening. It showed that almost all the investigated farms have happily survived the critical period of reorganization and that their economic position points distinctly to improved and more profitable farming. An unencumbered title to the land, the emancipation of labour from all local and communal burdens, the concentration of all force and all knowledge on the better employment of a holding granted "for eternity", the consciousness that trouble spent on the soil will not be lost — all this has had a marvellous influence on the whole course of farming as well as on the holders' daily lives. Among individual peasants fixed and strengthening habits of temperance are to be observed, habits which were introduced on that memorable day on which by the Tsar's will they were proclaimed as compulsory for the whole nation.

URUGUAY.

THE REFORM OF THE LAND TAX FROM THE POINT OF VIEW OF AGRICULTURE AND BREEDING.

SOURCES :

- LEY DE CONTRIBUCIÓN INMOBILIAR PARA LOS DEPARTAMENTOS DEL LITORAL E INTERIOR (*Law as to the Contribution of Real Estate in the Departments of the Coast and the Interior*) Diario Oficial, No. 3018, 18 January 1916.
- RECARGO EN LA CONTRIBUCIÓN INMOBILIARIA A LOS PROPIETARIOS NO DOMICILIADOS EN EL PAÍS (*Law Increasing the Contribution of Real Estate for Proprietors not domiciled within the Country*) Diario Oficial, N° 3029, 31 January 1916.
- DECRETO REGLAMENTARIO DE LA LEY QUE ANTECEDE (*Decree giving a ruling as to the Preceding Law*) Diario Oficial, No. 3029, 31 January 1916.
- BOLETIN DEL MINISTERIO DE HACIENDA (*Bulletin of the Minister of Finance*) 2nd year, Nos. 10, 11 and 12, 20 October, 20 November and 20 December 1915; 3rd year, Nos. 1, 2 and 3, 20 January, 20 February and 20 March 1916.

A certain number of legislative measures bearing on finance have recently been promulgated by the government of the eastern republic of Uruguay. They are of interest, some of them directly and some indirectly, to rural landed property and agriculture; and therefore they deserve detailed examination in this Review, the more so because they have given rise to long discussions in the general press and technical publications and in Parliament. Moreover they tend, while they give a national basis to the land tax, to develop the value of rural landed property, for they devote a part of the new revenue arising from them to the making and the multiplication of routes of communication in the interior of the country.

They should be regarded therefore not only as important modifications of the national fiscal arrangements, but also as an attempt to distribute more equitably the tax which burdens landed property, while aiming at creating new revenues which will favour the appreciation of lands and proportionately increase the agriculturist's sources of profits.

The measures which we will analyse individually are: (1) the law of 14 January 1916 as to the contribution to the revenue of real estate in the departments of the coast and the interior; (2) the law of the same date which increases the contribution of real estate and falls on landowners who are not domiciled within the country; and (3) the decree of 27 January which regu-

lates the public enforcement of the previous laws. The two latter measures complete the regime instituted by the first.

In view of the importance of the breeding of live stock, and of industries thence derivative, to Uruguayan economy, we will devote a paragraph of this short study to the reaction of the new financial arrangements on this form of activity, and will therefore briefly examine the present state of breeding in relation to fiscal burdens.

§ I. THE NEW LAW AS TO THE CONTRIBUTION OF REAL ESTATE.

a) 1st *Chief Provisions.*

Article 1 of the law of 14 January 1916 institutes an annual tax on privately owned real estate, whatever be the form of ownership, which is situated in any territory of the republic except the department of Montevideo. This tax is one of 4 per thousand on the value of rural lands, apart from that of any improvements which they may have received, if their estimated value do not exceed 2500 pesos (1) and if they constitute the only rural property of their owner. On lands of which the estimated value exceeds 2500 pesos the tax is of 4½ per thousand (2). Within urban and suburban districts it is of 6½ per thousand, on the combined valued of land and improvements.

According to article 3 owners of fields within rural districts, of which the area does not exceed 50 hectares (3) and of which at least 60 per cent. is under cultivation or has been reforested, will be taxed on only half the taxable value of these lands as determined by the valuation. When their total extent exceeds 50 hectares, only that portion of them which is destined for agriculture or forestation will benefit by this preference.

Of the revenue yielded by the tax of 6½ per thousand on urban and suburban property 1 per thousand will accrue to the economic administrative commissions of each department and 5½ per thousand to the general revenue of the country. The product of the 4½ per thousand tax on rural property will be divided as follows: (a) 1 per thousand to the economic administrative commissions of each department; (b) ½ per thousand to the permanent fund for routes of communication; and (c) 3 per thousand to the general revenue of the State.

Article 6 establishes that for the two financial years 1915-1916 and 1916-1917 the tax on rural real estate will be fixed by the general directing body of land valuation and according to the estimated value determined by the new census of rural landed property, less 20 per cent. "The general direc-

(1) 1 peso = about 4s 3d at par.

(2) This preferential treatment of small property was not provided by the original scheme, which fixed the land tax at 5 per thousand without making distinctions.

(3) 1 hectare = 2.47 acres.

tors of valuation", runs the text of this article, "will take into account among other things, in fixing the value of rural property, the market price of the lands and the income they probably yield, the latter being taken to represent at least 4 per cent. of the estimated value". Article 23, which refers to appeals, recognizes a right in every proprietor, who believes himself to be wronged by the quota of the tax incident on his real estate, to demand a new valuation from the competent authority. If he do not accept this second valuation the dispute will be brought before a commission of experts who will comprise, as well as members of the local municipal administration and the administrations of finance and the cadaster, four landowners domiciled in the district and chosen by the executive authority from a list of the principal tax payers. The latter will be drawn up by the departmental financial authority. This commission will, in examining the values estimated by the census, take into account the selling price of neighbouring rural properties resembling those under consideration, making deductions for improvements, and also the rent of the real estate in question and of others in the district. Where such rent exists the value as estimated shall be considered as a capital bearing interest at a rate between 3 and 4 per cent.: that is to say that if a property, or adjacent lands of approximately the same quality, be let at a rent of \$ 1.50 the hectare the estimated value cannot exceed \$ 50 nor be less than \$ 37.50.

The parties concerned, that is to say the departmental agent of the administration of finance and the landowner, can appeal against these decisions of the local commission of experts to the central commission of experts constituted at Montevideo and comprising the general director of direct taxation, the president of the rural association of Uruguay, and a rural landowner of the department whence the appeal arises who will be nominated by the executive power. The decision of the central commission will be final.

Properties of which the value does not exceed 100 pesos are, among other real estate, exempted from payment of the tax, as are properties belonging to rural societies and permanently assigned to agricultural exhibitions and competitions, and 50 per cent. of reforestation areas depending on agricultural and breeding establishments.

We leave on one side all the provisions as to urban and suburban real estate, to examine which would be outside the scope of this article.

The law will be in force, in the form which has been indicated, for two years.

b) The Basis of the Law and the Census of Property.

As can be seen from the brief summary which we have given of the law's chief provisions, it is inspired by a principle which is already applied in other countries.

The Uruguayan Minister of Finances recalled, in the explanatory note which he addressed on 26 November to the president of the financial commission of the Chamber of Representatives, for the better definition of

the scheme then being studied, that he aimed at superseding the old method of taxing land according to rented value by that already applied in Great Britain and Germany for the benefit of the State, and in Australia for the benefit of the municipalities, the method namely which was based on capital or market values.

The system hitherto in force in Uruguay was that of taxation by districts. But the minister in this note observed that "the rudimentary and arbitrary regulation by districts could exist only while there were no other means of arriving at a truly equal distribution of the tax; the method of taxing by districts interpreted in truth a principle in direct contradiction to the modern tendency of taxation, of which the incidence should be proportionate to the capacity to pay". To support his thesis the minister gave the following example. If in the same district there were fields worth respectively \$ 100, \$ 120, \$ 150, \$ 200 and \$ 250 the hectare, their average value would be \$ 164, on which taxable value the 6 $\frac{1}{2}$ per thousand tax would be imposed. But thus, in relation to the true value of his property, each proprietor would pay at an inverse ratio to his capacity to pay: the owners of the first field 10.66 per thousand, the owner of the second 8.80, the owner of the third 7.10, the owner of the fourth 5.33, and the owner of the fifth 4.30

To reach the present law a new census of rural property was first necessary, until there should exist a systematically drawn-up cadaster, the preparation of which would take long. The new census has been completed with remarkable celerity in quite recent years.

Those in charge of the valuation took into account, in determining the value of estates, data in the registry of sales, and in most cases they were able to obtain plans of the real estates and their dimensions from surveyors employed by private persons. Thus it was possible to prepare a sufficiently true and exact classification of rural properties.

The necessary basis therefore existed for applying to rural real estate the method of taxation already in force in the case of urban real estate, namely the method accordant with their precise and individual values; and the figures of the new census, which allow lands to be burdened according to the effective capital they represent, support the whole edifice of the reform we are considering.

In adopting the capital value of landed property as the basis of the tax, the government of Uruguay took into account conditions which are peculiar to all new countries in the full period of their growth, when their natural resources are still far from being developed or yielding their maximum return. The value of Uruguayan land may have fallen slightly in 1914-1915, owing to the extensive reaction from events in Europe; but it remains a value of which the increase is certain in normal times, and which at present has in no way reached the highest point possible to it.

The following table shows the progress in the value of the lands of the republic during the last ten years:

TABLE I. — *Increase in the Value of Landed Property.*

Year	Value of Landed Property
1904-1905	\$ 195,706,770
1905-1906	391,413,540
1906-1907	471,771,905
1907-1908	552,130,270
1908-1909	632,488,635
1909-1910	712,847,000
1913-1914	1,069,270,500
1914-1915	855,416,400

It is evident that in face of such an increase in the value of property it would be foolish to fix the tax according to the returns received by a landowner who does not cultivate his fields himself, but who lets them in order that they may be made productive.

c) The Product of the Tax and its Application.

The agrarian policy of the government of Uruguay aims steadily at the development of agriculture and breeding, the country's chief resources. We will not examine in detail the many measures which are proof of this constant preoccupation, but will merely note in passing that it devotes one million pesos a year to guaranteeing the railways which are of interest to rural districts, and has devoted about a million more to rural roads and bridges, and that it spends considerable sums annually on the sanitary inspection of animals, agricultural defence and such objects. In fact all forms of agricultural activity are encouraged and scientifically developed in the public interest of the country.

This policy is from the strictly fiscal point of view the only logical one, as is clear when the receipts of the treasury from rural property and urban property, respectively, are considered. The purely conventional taxable value of rural property, which was respected under the system of districts, was \$370,593,445 and this at 6 $\frac{1}{2}$ per thousand yielded \$2,408,857, as against \$406,555 which was the effective value of urban and suburban property and yielded a tax of \$321,143. But the new census makes the difference much more considerable for it raises the taxable value (that is the amount of the capital value less 20 per cent.) of rural property to \$712,000,000, which sum gives, when it is rendered liable to the 4 $\frac{1}{2}$ per thousand tax, an annual yield of \$3,204,000, that is ten times the sum furnished by urban property which subsists unchanged.

The importance to the government of a progressive increase in the capital formed by rural property is thus seen, and the fact that $\frac{1}{2}$ per thousand out of the 4 $\frac{1}{2}$ per thousand tax will be paid into a special fund for roads and communications will not fail to contribute to this importance. The ne-

cessity of making new and improving old roads cannot be questioned, for all the agricultural congresses untiringly insist on this point. For want of fixed resources for this end the public authorities have not hitherto been able to give the needed continuity to their roadmaking enterprise. The topographical conditions of Uruguay are very unfavourable to it, owing to the considerable number of watercourses which roads must cross and which must increase the costs of construction and maintenance. When a system of roads and paths has been established in all districts the transport of products will be facilitated and rendered infinitely less costly, and the value of the lands therefore increased. Under the system of districts the eighteen departments within the scope of the new law, which have an area of 17,064,865 hectares of rural land, disposed of only \$ 370,594 for bridges and roads, the employment of this sum being regulated by administrative economic commissions. Under the new system the sum accruing to these commissions will be about \$ 700,000, partly destined for the improvement of local roads. In addition about \$ 350,000 a year will, as has been said, form the nucleus of a special permanent fund for bridges and roads, and this sum will increase proportionately with the increasing value of the lands.

§ 2. BREEDING AND THE TAX ON REAL ESTATE.

Before becoming law the scheme for reforming the land tax gave rise to the most lively discussion and was the object of many criticisms, especially on the part of stock breeders. These considered that the rate at which it was proposed that they should pay aggravated their burden; although breeding, the "mother industry" of the country, was already heavily taxed.

The government did not fail to examine the objections submitted by the stock breeders, who contribute very largely to the wealth of the country, and replied to them by giving precise data which allowed their participation in public burdens to be exactly estimated.

On referring to the table giving the rise in the value of lands, it is seen that in ten years the capital represented by land has increased by 600,000,000 pesos. The $6\frac{1}{2}$ per thousand contribution of real estate did not follow the growth in the value of real estate, and was still calculated on \$ 423,000,000 instead of on \$ 1,069,270,500 in 1913, and on a little less than \$ 900,000,000 in 1915. Thus the land tax represented a total annual burden of about \$ 2,730,000.

The contribution of breeding to public and municipal revenue is represented by the export duty (1), as well as the land tax : namely by the port

(1) The products of the freezing industry are exempted in order to encourage its development.

duty of 1 per cent., the charge of 1½ per thousand for the patent to circulate, the tax of 25 ten-thousandths a kilogramme on live stock intended for the freezing chambers, and the statistical tax. Altogether the fiscal burdens on breeding were equivalent in 1914-1915 to 4.62 per thousand of the value of rural lands, as against 5.21 per thousand in 1911-1912 and 5.06 per thousand in 1909-1910.

The following figures show the total amount of the fiscal revenue derived from breeding :

TABLE II. — *Fiscal Burdens on Stock-Breeding.*

Year	Total Product of the Various Taxes and Duties
1909-1910	\$ 3,606,677
1910-1911	3,270,857
1911-1912	4,459,685
1912-1913	4,319,533
1913-1914	3,920,622
1914-1915	3,955,387

Thus taxes on breeding do not furnish as much as four million pesos a year, in spite of the increase in value of landed property and the fact that the price of live stock has been multiplied by five in the last twenty years.

The following table shows the variations in the price of live stock from 1911 to 1915, according to the export figures.

TABLE III.

Variations in the Price of Live Stock Exported in one Month, from 1911 to 1915.

Kind of Live Stock	September 1911		September 1912		September 1913		September 1914		September 1915	
	Heads of Live Stock	Average Value of one Animal	Heads of Live Stock	Average Value of one Animal	Heads of Live Stock	Average Value of one Animal	Heads of Live Stock	Average Value of one Animal	Heads of Live Stock	Average Value of one Animal
		\$		\$		\$		\$		\$
Bullocks	6,951	26.61	10,105	26.34	11,933	45.77	13,100	57.68	37,668	64.27
Oxen	1,177	29.59	1,412	33.85	1,014	53.46	838	65.58	2,386	66.77
Cows	5,968	18.89	7,208	23.30	2,778	38.44	7,344	45.84	8,325	46.72
Calves	2,924	7.11	1,370	13.49	977	21.64	1,851	19.33	1,838	20.45

As regards the development of the live stock industry, the data which we give below, and which refer to the export of the chief products of live

stock — salted and dried ox-skins, dried sheepskins, wool, frozen meat and preserved meat (*tasajo*) — allow its stages to be followed.

TABLE IV. — *Annual Value of Exported Products of Live Stock.*

Official Values (approximate)

1892	\$ 25,951,819	1905	\$ 33,437,888
1893	27,681,373	1906	30,805,061
1894	33,479,511	1907	34,912,872
1895	32,543,644	1908	40,296,367
1896	30,403,084	1909	45,103,422
1897	29,319,573	1910	43,699,798
1898	30,276,916	1911	46,015,834
1899	36,574,164		
1900	29,410,862	(Effective values)	
1901	27,762,782	1912	53,041,855
1902	33,660,300	1913	69,771,530
1903	37,369,402	1914	51,208,955
1904	38,484,817	1915 (January-Aug.)	41,896,155

If we take into account only these values and not the circumstances, alleged by the breeders, that the considerable mortality among live stock last year has made their situation particularly difficult, we see that the value of the land has risen, that that of production has increased, that the frozen meat industry — which has a direct relation to breeding — has developed importantly, and that the total contribution of breeders to the State has diminished, absolutely and relatively.

As the government has itself observed, it would profit by a suppression of all secondary taxes and dues and the retention of only an "industrial patent", subsisting side by side with the land tax, as in the Argentine Republic where such patent amounts to 2 per thousand of the value of lands. For the moment the system in force has not however been changed in any way: products are taxed on leaving the country on the presumption that persons who have realized an industrial profit will thus contribute rather than the breeders.

Since the law of 14 January 1916 was voted after a simple debate, the supposition is that the breeders have recognized its advantage, as shown by the arguments of the government supported by official statistics.

§ 3. THE LAND TAX AND LANDOWNERS NOT RESIDENT IN THE COUNTRY.

On 14 January 1916 the Parliament of Uruguay voted a law which completes that on the contribution of real estate. As therein provided, persons and corporations who are not domiciled in the country, that is whose business has its headquarters abroad, will pay double the tax im-

posed by the law which we have examined. The same liability attaches to landowners who, while they are domiciled in the territory of the republic, have been outside it for more than a year when the tax becomes payable. Exemption from this additional liability is given to foreign commercial or industrial companies who are established in the country by a State grant, to the properties on which they conduct the industry or trade which is the object of the grant, and to certain properties in the coast watering-places of the country.

The landowner affected by article 1 of this law, who does not make the stipulated payment, will be liable to a fine of 20 per cent. of the amount of the tax on his real estate, including the additional tax.

Moreover by a clause which is proof of the desire to strike at the owner rather than the lessee, the law establishes that the additional tax is payable by the landlord, even if the lease stipulate that the land tax is to fall on the lessee.

As a consequence of the provisions we have indicated, the decree regulating the law establishes that deposit and discount banks, credit banks and institutions, and societies and individuals who administer real estate belonging to the persons included by article 1 of the law, must in the course of February of each year notify such fact to the directors of direct taxation in the capital and the administration of revenues in the departments, giving all required information as to the name, quality and domicile of the proprietors they represent. The administration will thus be able to prepare a register of absentee proprietors.

The Minister of Finances has made a point of stating exactly, on 11 March 1916, the principle of the law, which is "to tax the absentee landlord, owing to the economic evil caused to a country by a proprietor letting his real estate to others who develop it with their own capital".

The government wished especially to exempt from this provision the large Liebig establishments, on the ground that the capital employed on this enterprise, which was at first foreign, has been so invested in Uruguay that there has been an incorporation of positive wealth, of a factor of production, and of an element which so raises the value of the products of breeding that it has given birth to a centre of industrial life, and caused a numerous labouring population to be established on the country's soil.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

ITALY.

1. RECENT MEASURES AS TO AGRICULTURAL CONTRACTS. — *Gazzetta Ufficiale del Regno d'Italia*, No. 261, Rome, 7 November 1916.

By a decree of the Lieutenant General of the kingdom, dated 2 November 1916, No. 1480, important steps have been taken as to agricultural contracts, always with the idea of helping agriculturists to overcome the difficulties of the present time. The principal provisions are as follows:

Agricultural contracts in writing or by word of mouth, whether involving some system of partnership or a fixed wage, are not to have force until the year after that in which peace is made. The Arbitration Commission of *mandamento*, of which there is question in Article 11 of the decree of 30 May 1916, No. 645 (1), can in every case grant, at the request of the cultivator, the wage-earner or the small farmer and on recognized and serious grounds, that the contract cease to bind at the end of the current agricultural year.

The widow, children, parents or other heirs of the cultivator or small farmer who dies in the war, or as a consequence of the war, can, if they be part of his family employed in cultivating his holding, apply to the Arbitration Commission of *mandamento* for the delay of the contract as stated above, if they show proof that they are able to execute the clauses of such contract.

In contracts involving the principle of partnership, where this implies only a sharing of produce between the landowner and the cultivator, the former or his manager, or the cultivator or his representatives, may in the cases which have been mentioned bring onto the holding extra labourers, corresponding in number to those members of the cultivator's family who are with the colours or have been killed or disabled in the war, and the resultant expense shall be shared in the proportion fixed for the sharing of produce.

In the case of small farmers' contracts drawn up before 24 May 1915, if the Arbitration Commission of *mandamento* recognize, at the instance of the lessee, that the insufficient cultivation of the leasehold, by reason

(1) See *International Review of Agricultural Economics*, October 1916, page. 119.

of the call to the colours of members of the lessee's family, has placed it economically in a difficult condition, the commission may declare a reduction of rent for the current year and for the succeeding years during which the delay continues, in a proportion not exceeding one half of such rent for each man called to the colours.

In the case of contracts of any kind imposing fixed wages, the Arbitration Commission may exceptionally, if the parties have not come to an agreement, grant at the instance of the labourer, taking into account the conditions of labour and production, an increase of wages.

The last part of the decree contains complementary provisions for the Arbitration Commissions of *mandamento*, and especially for the Provincial Commissions of Agriculture formed by Article 8 of the decree of 30 May 1916, No. 645. Persons representing economic institutions (agricultural co-operative societies), or technical institutions (agricultural committees), or local institutions, are summoned to be members of these commissions of which the task has been enlarged. They are charged :

a) To make a levy of the labour available for agriculture in the different zones of the province, using the authority of communes, and also that of the labour bureaux where these exist, and of the workmen's organizations and other social institutions publicly recognized or subsidized; and to estimate the adequacy or inadequacy of the supply of labour to the needs of local farms, organizing accordingly its displacement from one zone to another.

b) To make a levy of the agricultural machines available in the province and facilitate the greatest possible use of them.

c) To keep count of variations in the area devoted to each crop within the province, to notify the Ministry of Agriculture of the causes for changes, and make suggestions with a view to using uncultivated land to the greatest possible extent,

d) To regulate and facilitate, by means of agreements with Commissions of Agriculture in adjacent provinces, migrations from one province to another, according to the supply of labour available and the needs of agriculture.

The officials of communes, the inspectors of industry and labour, the holders of the peripatetic chairs of agriculture, and, generally, all officials depending on the Ministry of Agriculture, and all those nominated to legally recognized agricultural institutions and to social institutions subsidized by public authority, are bound to give their aid, when asked, to these Provincial Commissions.

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2. RULES FOR GRANTING THE TEMPORARY USE OF AGRICULTURAL MACHINES.

Among measures favouring agriculturists lately adopted by the Italian government, one which deserves notice is that allowing the Minister

of Agriculture (Decree of 6 June 1915, No. 826) to make large purchases of agricultural motors and machines of which agriculturists and rural organizations will be allowed the temporary use. Machines thus bought will be entrusted to the government depots which are managed as follows :

In every depot of agricultural machines and tools established by the Ministry of Agriculture there is, first, a manager who is helped by a secretary and responsible for the care of the machines and the dissemination of their use according to stated rules.

By satisfying the demands of the agricultural schools, the committees, the associations, and the private agriculturists and machine-makers, each depot meets the needs of rural economy in a fixed district assigned to it by the ministry.

The manager himself keeps a register of all the machines, implements and tools in his depot, numbering and signing its pages himself. Whenever a machine or tool is received he enters its description in the register, sends to the ministry a receipt and certificate of acceptance, and notifies all the local agricultural schools, committees and communes, which are requested to notify the public.

Whoever wishes to make trial of the machines and implements in the depot must apply in writing to the manager, stating which machine or tool he wants, the place in which it will be used and the time for which he intends to employ it.

The manager may exact from any applicant that he give as surety for the price at which the machine is inventoried a person known to be solvent, or deposit a sum equal to such price. Thus it becomes possible to cover the loss of a lent machine, or the cost of necessary repairs, at the expense of the applicant. The schools and agricultural committees are exempt from obligation to give a guarantee.

When a manager receives applications from agricultural schools, committees or individuals outside the district assigned to his depot, he must send them to the ministry which reserves the right to consider and decide on them.

Applications are granted in the following order : first those of the schools, then those of the committees and of associations existing in the general interest of agriculture, then those of members of the committees, and finally those of private agriculturists and of machine-makers who wish to study and copy the depot's machines in their workshops.

Applications of the same kind are dealt with in order of priority. When there are a number of applications for the same machine the manager must give the preference to whoever has not yet made trial of it.

Without special leave from the ministry machines must not be granted for more than fifteen days or more than twice to the same individual. But they may be granted more frequently and for a longer time to agricultural committees and schools.

The grantee is responsible from the moment at which he signs a receipt for the machine. All costs of transport and maintenance, and of ordinary and other repairs are chargeable to him.

For every day for which the return of the machine is delayed beyond the term of the grant, the grantee must pay a fine as compensation and interest. Its amount will be previously determined by the manager of the depot according to the importance and value of the machine.

When the machine is returned a report must be made, noting the condition in which it is brought back to the depot.

Persons who have used the machines must, when returning them, present a detailed report on results obtained, costs incurred, and the conditions of weather and place in which trial of them has been made. In this report all results must be carefully compared with those which would have been obtained had ordinary expedients been used and customary local practices followed. In making calculations allowance should be made for interest on the sum employed to purchase the machine or implement and for amortization. The manager must refuse to grant further machines to persons who have neglected to obey this provision which is of evident utility.

Finally, in the first month of every year the manager must present to the ministry a complete report of the trials of the machines and implements in his depot during the preceding year. In forwarding this report he must suggest the replacement of machines which no longer meet local needs, either because they have undergone depreciation or because agricultural mechanics have progressed. At the same time he must communicate any desires for new machines, of more recent or more perfect pattern, which have been expressed to him.

* * *

3. THE FOUNDATION OF AN "ISTITUTO AUTONOMO DI BONIFICAMENTO AGRARIO E DI COLONIZZAZIONE PER LA SARDEGNA". — *Gazzetta Ufficiale del Regno d'Italia*, No. 249, Rome, 23 October 1916.

By a decree of the General Lieutenancy of the kingdom, No. 1316, dated 3 September 1916, there has been founded at Sauluri (Cagliari) an autonomous institute of agricultural beneficence and of colonization for Sardinia, and it has received for fifty years the use of the experimental estate, formed on 25 November 1915, which comprises the large property called "Stabilimento Vittorio Emanuele".

This institute is obliged gradually to provide for works of agricultural benefit, land improvement and colonization, and for the division of its land into farms which will be granted to cultivators; all according to plans approved by the Ministry of Agriculture.

For the purpose of these tasks the institute may receive preferential loans, and also advances and loans from institutions of land or agricultural credit and savings banks.

It is further charged to promote the foundation of an agricultural bank and agricultural union, chiefly in the interest of the cultivators. It may also promote such co-operative consumers', labourers' and producers' associations as co-operative dairies, oilmills, cellars etc.

The institute is ruled by an administrative council composed of two representatives of the Ministry of Agriculture, two of the Ministry of Public Works and one of the Ministry of Finances — all of whom are nominated by royal decree —, and of a technical manager.

The administrative council manages the property of the institute, nominates its employees, and sees that it pursues the objects which have been cited. The councillors hold office for three years and may be re-elected. They nominate a chairman from among themselves.

The technical manager is responsible for the work of the institute, already defined: he prescribes and inspects systems of agriculture and agricultural works, and provides for the execution of the resolutions of the administrative council.

The institute converts the returns from its property into its own income, which it uses to extinguish the loans it contracts and to pay the costs of administration and agriculture and of the maintenance of works of beneficence, as well as to meet every other necessary expense and to form a fund intended for later agricultural improvements.

The Ministry of Agriculture acts, through an especial organization, as superintendent and guardian of the institute and of the agricultural enterprise accessory to it.

* * *

4. NATIONAL CHARITY FOR THE ORPHANS OF PEASANTS KILLED IN THE WAR

Constitution approved by a decree of the General Lieutenantcy of the kingdom, 6 August 1916, No. 1025. *Gazzetta Ufficiale del Regno d'Italia*, No. 201, Rome, 26 August 1916.

We have already alluded (1) to the great movement which has for some time been spreading in Italy in favour of helping the orphans of peasants killed in the war, and also the active propaganda of the *Istituto nazionale della mutualità agraria* for the foundation of agricultural colonies especially designed for the reception of these orphans and their education in their fathers' callings. In order better to direct and co-ordinate this movement there has recently been formed in Rome the *Opera nazionale per gli orfani dei contadini morti in guerra e per i figli dei contadini resi in guerra permanentemente inabili al lavoro*, a national charity for the orphans of peasants killed in the war and for the children of peasants permanently disabled by the war, which acquired status as a corporation having a moral aim by a decree dated 6 August 1916, No. 1025. Its objects are:

a) to see that aid is given to the orphans of peasants by special local protective agencies (2) or other institutions;

(1) See *International Review of Agricultural Economics*, March 1916.

(2) See in this connection an interesting pamphlet by Dr. Mario Casalini, general secretary of the charity, "L'Assistenza agli orfani dei contadini. I patronati, la loro organizzazione il loro funzionamento". Chiusi, typ. Cerete, 1916.

b) to promote and favour the formation of protective agencies and *agricultural colonies* in the various districts of Italy, with a view to receiving such of these orphans and children of peasants as cannot obtain either help or a fit technical education within their families ;

c) to co-ordinate the activity of local protective agencies, agricultural agencies, and other institutions having analogous aims ;

d) to promote one or more institutions capable of being connected with the existing institutions of agricultural credit, in order to help the orphans to buy small rural holdings which they will themselves farm when they have reached majority.

Wherever there are already protective agencies or agricultural colonies, legally constituted and recognized by the charity, the duty of helping the peasants' children generally falls on them. Where there are none the charity renders especial aid to these orphans by means of delegates.

When it has accomplished its duty to the orphans of peasants killed in the war it will extend its benefits to other peasants' orphans. To compass its aims it disposes of a) the eventual income of its property ; b) the annual subscriptions of ordinary members and subscribing societies ; c) the subscriptions of honorary members ; d) the donations, legacies, temporary donations and extraordinary income which will eventually accrue to it. Its members belong to the following categories : a) members giving a donation, in other words all co-operative and mutual aid institutions which contribute more than 50 liras a year ; b) ordinary members, those subscribing 10 liras a year ; c) benefactory societies, namely every institution, ministry, province, commune, savings bank, chamber of commerce, organization or individual giving an annual subsidy of at least 100 liras ; d) perpetual honorary members, namely institutions which make one contribution of at least 100 liras.

The capital paid by the honorary members is inalienable, and only its income can be used to constitute or complete maintenance bursaries for the orphans.

There are ordinary and extraordinary general assemblies of members. The former meets once a year to discuss and approve the report of the charity's moral and technical activity and to choose the general council. Its resolutions are fully valid if at least a tenth of the regularly inscribed members be present at it, or one hour after the time indicated in the invitation to the meeting for its opening, whatever number of members be present. When there is question of modifying the by-laws one fifth of the members are needed to constitute a quorum. Resolutions are passed by an absolute majority.

This charity is managed by a general council of twenty-nine members who elect from among themselves a president, three vice-presidents, and an executive committee consisting of the president, the vice-president of oldest standing, five ordinary members of the council and a secretary. The members of the council and the executive committee hold office for three years.

The council meets regularly twice a year. It administers the charity's

property, and approves reports for the general meeting and balance-sheets drawn up by the executive committee. The latter administers the charity within the limits of its budget, and prepares and submits to the general council budgets and balance-sheets, the report on the moral and technical activity of the charity, etc :

If the general meeting should decide to dissolve the charity its property will pass to the National Bank of Thrift.

Propaganda in favour of the formation of the agricultural colonies and protective agencies, already mentioned, has met with excellent results : there are already several agricultural colonies ; and numerous protective agencies for the assistance of peasants' orphans have been constituted, especially by the initiative of provinces, each of which will have its own agency. There is in Italy a typical example of institutions of this kind, the *Opera per l'assistenza e la educazione professionale degli orfani dei lavoratori della terra*, a charity for aiding and technically educating the orphans of agricultural labourers in the province of Bologna.

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5. AN IMPORTANT SCHEME FOR THE FOUNDATION OF A PROVINCIAL INSTITUTION OF SOCIAL AID. Communicated by the provincial deputation of Bergamo on 7 April 1916.

At a recent meeting of the provincial council of Bergamo the foundation was proposed of a large institution of social aid which should be formed on the initiative of the provincial deputation, and with the co-operation of all public and private institutions " interested in and responsible for the protection of public health and the economic and social welfare of the working classes ". The proposed institution would act through two sections — a hygienic and sanitary and a social and economic section. It would be the task of the latter :

I. *Statistics* : a) To collect, collate and publish information as to labour — chiefly in regard to its organization and remuneration in Italy and in foreign countries, preferably those to which there was emigration ; and as to the relations of labour and capital ; the number and conditions of labourers and the conditions of unemployment ; strikes and their causes and results ; and the number, causes and consequences of accidents to workmen ; b) To discover the development of the retrogression and the technical and economic conditions of social institutions in the province, as well as their influence on the welfare of the working classes and on the progress of agriculture.

II. *Legislation* : c) To disseminate among the people a knowledge of social legislation, and to undertake all the studies and researches in matters of legislation, which the government, the higher council of labour or other institutions should require.

III. *Inspectorate*: d) To see that all social and labour legislation was applied, and denounce those contravening it to the competent authorities.

IV. *Conciliation*: e) To settle amicably disputes between employers and workmen and between the latter and contractors, and in general all disputes as to agreements relative to labour contracts.

V. *Placing of labour*: f) To place workmen and wage-earners, receiving offers of and demands for work, bringing workmen and employers together, and facilitating the conclusion of contracts.

VI. *Thrift, mutual aid, co-operation*: g) To contribute generally to a large development of saving, thrift, mutual aid and co-operation in the working classes, and to render the organization of mutual and co-operative societies more efficient by co-ordinating them in federal institutions; and especially; h) To induce working people, by means of an active propaganda and increased assistance, to join individually or collectively the *Cassa nazionale di previdenza per l'invalidità e la vecchiaia degli operai*, a national thrift bank providing against the disablement and old age of working people, and other government institutions of thrift (*Cassa nazionale di assicurazione per gl'infortuni degli operai sul lavoro*, National Fund for Insurance against the Accidents of Labour); i) To popularize rules for the constitution and the successful working of co-operative associations of credit, labour, production, consumption etc.; thrift and mutual societies in their different forms; societies for mutual insurance against mortality among live stock, damage done by fire or hail and the accidents of labour; mutual aid societies; mutual educational and forestry societies, etc.; as well as all institutions aiming at the moral and material improvement of the masses; and to help the establishment of such societies on the most scientific and practical models; j) To help and to superintend all the economic institutions by means of frequent inspections, inducing them to keep regular accounts, and directing co-operative and mutual organization towards a uniform system of book-keeping which would produce scientific and uniform records fitted to be the material of statistical labour.

This section proposes to reach its aim: a) By propaganda, oral and written; assistance given to the social and economic institutions in the matter of technique and book-keeping; legal advice and aid in the matter of giving opinions, solving problems, arranging reconciliations, etc. (*peripatetic chair of thrift and mutuality*); b) By competitions, exhibitions or other forms of encouragement to the better economic institutions, and by propaganda and social aid.

There would be assigned to the maintenance of the institution: a) an annual sum allotted by the province and provided by a special fund; b) the annual contributions or subsidies of public or private institutions (ministries, national bank of thrift, savings bank, communes, *agricultural societies*, etc.); c) the donations and legacies which might accrue; d) various income.

To take charge of the administration and working of the institution there would be a council of eleven members — six of them chosen by the provincial council and five by a meeting of the representatives of the soci-

eties which had contributed to the institute —, an executive committee, and a committee of official arbitrators having three effective members and two vice-members.

UNITED STATES.

OVERTIME IN THE FRUIT AND VEGETABLE CANNING AND PACKING INDUSTRY OF OREGON. — *Monthly Review of the U. S. Bureau of Labor Statistics*, Washington, July 1915.

The Oregon Industrial Welfare Commission published under date of 26 May 1914 an order providing for the issue of emergency overtime permits to fruit and vegetable canning and packing establishments. Such overtime is not to be permitted for more than six calendar weeks, and the whole working time, including overtime, is not to exceed sixty hours in any calendar week nor ten hours in any day. The following is the order in full.

" TAKE NOTICE: That pursuant to the authority granted by chapter 35, General Laws of Oregon, 1915, the industrial welfare commission has investigated the emergency overtime requirements of the fruit and vegetable canning and packing industry of Oregon and finds that for six (6) weeks of each year the aforesaid industry requires emergency overtime beyond the fifty-four (54) hours a week prescribed as maximum hours for women workers in such industry in I. W. C. Orders No. 2 and No. 5.

" WHEREFORE, the industrial welfare commission authorizes and permits the employment of adult women in fruit and vegetable canning and packing establishments in the State of Oregon for more than fifty-four (54) hours a week under the following conditions and rules which the aforesaid commission hereby today determines and prescribes:

" (1) Such emergency overtime shall not be permitted for more than six (6) calendar weeks, from May 1 to December 1 in any year.

" (2) The emergency overtime shall not exceed the fifty-four (54) hours a week now prescribed by I. W. C. Orders No. 2 and No. 5 by more than six (6) hours for any calendar week.

" (3) Nothing in this permit or order shall be interpreted as authorizing the employment of any woman for more than ten (10) hours in any day.

" (4) Such emergency overtime shall be paid for at a rate of not less than twenty-five cents (25c) an hour; and the earnings for emergency overtime shall in no case be included in the weekly minimum wage prescribed by the rulings of the commission, but shall in every case be over and above the weekly minimum wage prescribed by I. W. C. Orders No. 2 and No. 5 for adult women workers.

" (5) The owner or manager of every fruit and vegetable cannery or packing establishment in Oregon employing women under this emergency overtime permit shall furnish the industrial welfare commission on

or before the 5th day of each month a transcript, duly verified as hereinafter provided, of the weekly time and pay roll of each woman who has worked more than fifty-four (54) hours in any one week of the preceding month. Said transcript shall furnish the name and employee number of each woman employee.

" (6) Said transcript shall be verified by said owner or manager or some person in his behalf having knowledge of the facts by subscribing and swearing to a statement that said transcript is a full, true and accurate statement of the overtime worked by and the wages paid to each and every woman who has worked overtime ".

RUGGERI ALFREDO, gerente responsable

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXV.
8TH. YEAR: NUMBER 3
MARCH, 1917.



ROME
PRINTING OFFICE OF THE INSTITUTE
1917

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Part I: Co-operation and Association

GERMANY.

THE GENERAL RAIFFEISEN FEDERATION IN 1914-1915 (*concluded*) (1).

§ 2. THE RURAL BANKS (*Spar- und Darlehnskassenvereine*)

The rural banks constitute 80 per cent of all the 5,680 co-operative societies belonging to the General Raiffeisen Federation, for they number 4,598. At the end of 1914 there were 4,558 rural banks. In 1915 forty-eight more joined the federation while eight left it. The increase was therefore one of forty societies. In 1914 it had been one of seventy-three.

All the rural banks are unlimited liability societies.

The report on these societies for 1914 was presented by 4,421 rural banks — 137 of them not reporting because their whole staffs had been mobilized.

The 4,421 societies included 485,416 members, that is an average of 110 for one society. The increase since 1913 was one of 8,839 members, the membership of 1913 having increased by 15,206 on that of 1912, which year had recorded an increase of 17,069 on 1911.

The capital in shares of the 4,421 rural banks was 5,057,345 marks (2), the reserve fund 32,778,993 marks, the working capital 827,605,640 marks.

The turnover was less in 1914 than in previous years, namely: 1914 — 1,435,215,859 marks; 1913 — 1,572,013,669 marks; 1912 — 1,573,887,576 marks.

The decrease is a result of the restriction of credit during the war.

(1) See first part in our issue for February 1917, page 1.

(2) 1 mark = about 11 $\frac{3}{4}$ d. at par.

Savings.

Savings amounted to 82 per cent. of the year's capital, namely 682,618,933 marks, and had increased by 33,956,963 marks on those of 1913.

The increase did not however arise out of increased payments but out of a diminution of deductions, as appears from the following figures :

	Payments	Deductions
1912.	204,175,046	168,881,862
1913.	214,520,120	173,843,266
1914.	195,843,529	152,286,744

Savings paid in were less in 1914 than in 1913 and 1912. But since here also the amount of deductions was less an increase in the total amount of savings resulted.

The rate of interest paid by the banks to savers was from 3 to 6 per cent., having been from 3 to 5 per cent. in 1913.

Current Accounts at the Central Bank.

At the end of 1914 the rural banks had debited current accounts at the Central Bank amounting to 68,772,537 marks. The debt was less by 9,819,567 marks than its amount in 1913 and less by 8,430,541 marks than its amount in 1912.

As a consequence of this decrease in current account liabilities and the increase in current account credit the rural banks, which were the debtors of the Central Bank before the war, had become its creditors, for their credit accounts with this bank reached the sum of 95,139,579 marks as against 78,302,126 marks in 1913.

Credit for Fixed Terms.

Such credit amounted to 61.5 per cent. of the whole assets of the rural banks, namely 499,673,745 marks out of 832,006,308 marks.

The increase since 1913 was of about eight million marks but it resulted, as the following figures will show, not on increased new credit but on diminished repayments :

	Credit granted	Repayments
1913.	98,763,252	70,776,473
1914.	72,001,670	57,306,084

The rate of interest paid by members to the rural banks was from $3\frac{3}{4}$ to $8\frac{1}{2}$ per cent., as compared to its rate of from 3 to 7 per cent. in 1913.

Current Accounts with Members.

The currents account of the societies' banks and their members increase from year to year. In 1914, 3,536 rural banks — 80 per cent. of them — had opened current accounts with their members.

The total amounts of these current accounts were as follows :

Credit current accounts.	45,152	for	123,722,498	marks
Debit " "	24,606		32,567,379	"

A new circumstance appeared in connection with these accounts. Previously the sums paid by members into the banks were always less than those paid by banks to members, but in 1914 the converse was true, as appears from the following figures :

	Payments by Members	Payments by Banks
1912.	132,879,067	144,539,139
1913.	136,225,301	149,073,587
1914.	131,203,766	127,860,370

If the totals of incoming and outgoing sums be examined the following conclusions are reached :

1. The total receipts — payments of members in savings and to current accounts, repayments of debts by members, credit granted by the Central Bank — , and the total disbursements — credit granted to members, repayments of sums due to members and to the Central Bank — were less than in previous years.

2. The total receipts exceeded the total disbursements. This is the contrary of what was true of earlier years and is explained by the restricted credit granted during the war :

	Total Receipts	Total Disbursements
1912.	407,214,867 marks	423,903,591 marks
1913.	421,521,894 "	421,680,105 "
1914.	384,353,379 "	352,148,784 "

In addition to credit transactions many rural banks buy and sell merchandise on behalf of their members.

The purchase of merchandise was practised by 3,917 rural banks. The value of the bought merchandise was 54,326,650 marks as against 68,641,827 marks in 1914.

The details of purchases show that the following sums were spent on the following articles in the two years compared :

Manure. . . .	21,892,942 marks	23,979,835 marks
Forage. . . .	17,476,904 "	19,899,825 "
Combustibles. .	6,456,275 "	6,973,625 "
Seeds.	2,189,015 "	2,532,716 "
Machines. . .	910,322 "	1,344,194 "
Various. . . .	6,049,771 "	4,451,265 " .

The sale of merchandise for members was unimportant, special co-operative societies having been created for this object. The value of the merchandise sold by the rural banks was 2,743,861 marks.

For the 4,421 rural banks the year's books were closed showing : a profit in the case of

3,884 which realized altogether	3,212,113 marks of profit;
a loss in that of 516 " lost	" 523,214 " .

Twenty-one realized neither a loss nor a profit.

The net profits were therefore 2,688,899 marks, as against 2,852,416 marks in the previous year.

§ 3. CO-OPERATIVE SOCIETIES OF CONSUMPTION, PRODUCTION AND LABOUR.

At the end of 1914, 1045 co-operative societies of this kind belonged to the General Raiffeisen Federation. In 1915 it was joined by thirty-six more while fifteen ceased to belong, so that the total membership was 1066, distributed as follows :

	31 December 1914	31 December 1915
I. Co-operative Consumers' Societies	51	65
II. Co-operative Producers' Societies	488	489
1. Dairies	310	309
2. Cellars	44	43
3. Distilleries	52	52
4. Essication of Potatoes . . .	16	17
5. Granaries	20	20
6. Sale of Live Stock	26	28
7. Various	20	20
III. Co-operative Labour Societies.	417	414
1. Threshing	82	83
2. Employment of Electric Power	316	315
3. Various	19	16
IV. Co-operative Breeding and Pasturage Societies	20	22
V. Co-operative Societies of Artisans and Tradesmen . . .	9	9
VI. Various	60	67

These societies had the following forms :

	1914	1915
Unlimited liability societies.	262	258
Limited " "	760	782

It is seen that those of the second kind had become more numerous, those of the first fewer. In the case of all the kinds of co-operative societies which have been enumerated the prevalent type is that of a limited liability society, except in the case of collective cellars which are held by unlimited liability societies in forty out of forty-three cases.

Of all the co-operative societies existing at the end of 1914 only 807 reported on their business. Owing to the mobilization of their staffs 215 made no report.

1. *Co-operative Societies for the Purchase and Sale of Merchandise.*

At the end of 1914 there were fifty-one consumers' co-operative societies and twenty co-operative granaries. During 1915 there were fourteen new adhesions, so that at the end of the year there were eighty-five societies, seventy-five having limited and ten unlimited liability. Of this number only forty-eight reported on their business in 1914.

five are not subject to any rule of the law on co-operative societies. Only thirty-four reported on their work.

The total number of their members was 617. Their capital in shares was 413,702 marks, their reserve fund 155,789 marks, their year's capital 2,240,730 marks and their fixed capital 1,596,860 marks. The capital belonging in their own right to the unlimited liability societies was equal to 6.8 per cent. of their year's income. In the case of the limited liability societies, this percentage was 23.7.

Only twenty-four distilleries have furnished data as to their production. These had used 324,519 zentners of potatoes, 1,798 zentners of beet-root, and 1,678 zentners of Jerusalem artichokes. Of this quantity members had delivered only 290,423 zentners; the rest had been bought in the market. The co-operative societies had paid 1.79 marks for the potatoes which had been delivered.

Owing to statutory restrictions production had been less than in the previous year.

5. *Essication of Potatoes.*

Only sixteen co-operative societies of this kind belong to the General Raiffeisen Federation, two of them have unlimited and twelve of them limited liability while two are not subject to the law on co-operative societies.

All these sixteen societies reported on their activity, as did five other societies which essicate potatoes as an accessory business. They comprised 936 members, they had a capital in shares of 341,509 marks, a reserve fund of 96,935 marks, a year's capital of 2,255,748 marks and a fixed capital of 1,278,360.

The sixteen societies treated 1,216,071 zentners of potatoes by essication, the other five 138,173 zentners. Of these quantities 938,512 zentners were delivered by members and 109,119 zentners by other producers, while 168,440 zentners were bought in the market. The resultant production was of 339,370 zentners of potato flakes and 32,665 zentners of potato slices. The greater share of these products was remitted to the members and others from whom the raw material had been bought, only 165,161 zentners of flakes and 5,500 zentners of slices being sold in the market.

6. *The Sale of Live Stock.*

Co-operative societies having this object have only existed for a few years and are all in East Prussia where the production of live stock is greatly in excess of the consumption.

There were twenty-six of them at the end of 1914, and in 1915 there were three new adhesions while one society retired from membership. At the end of 1915 there were therefore twenty-eight societies, namely eleven in the Königsberg district federation, eight in that of Dantzig, seven in that of Berlin, and two each in those of Coblenz and Ludwigshafen.

All are limited liability societies. They regularly sell live stock on commission. Only two of them buy their members' live stock and resell it in the market on their own account.

Only fourteen reported on their business and they did not give detailed data.

The number of members was 5,835, the capital in shares 17,750 marks, the reserve fund 109, 320 marks, the year's capital 329,950 marks.

7. Co-operative Threshing Societies.

There were eighty-two of these at the end of 1914, and at the end of 1915 eighty-three of which fifty-nine had limited and twenty-five unlimited liability.

The data as to their business were furnished by seventy-four societies of whom twelve gave few details.

Their members numbered 1,907, their capital in shares was 101,072 marks, their reserve fund 37,539 marks, the year's capital 646,965 marks, of which the greater part was represented by the value of the machines. The year's capital varies notably according to whether a society owns or hires its machines.

30	societies	closed	their	books	showing	a	total	profit	of	11,639	marks
32	"	"	"	"	"	"	"	loss	"	25,579	"
12	"	"	"	"	"	"	"	neither	profit	nor	loss.

The losses result on an insufficient use of the machines. They worked in 1914 for 36,101 hours, that is on an average 582 hours for each society, instead of 37,835 hours of work and an average of 641 for one society as in 1913.

8. Co-operative Societies for the Employment of Electric Power.

The first co-operative society of this kind was formed in 1906. At the end of 1914 there were 316 of them, and at the end of 1915 there were 315 of which nine had unlimited and 307 limited liability. Only a few societies own their plant: most of them hire their electric power on lease from an enterprise and distribute it among their members.

213 of them reported on their work in 1914.

Their members numbered 15,396, their capital in shares was 159,490 marks, their reserve fund 8,364,052 marks, their fixed capital 4,991,445 marks.

111	societies	closed	their	books	showing	a	total	profit	of	44,365	marks
97	"	"	"	"	"	"	"	loss	"	31,584	"
5	"	"	"	"	"	"	"	neither	profit	nor	loss.

The following table gives data as to co-operative societies less important than those with which we have dealt:

Object	No. of Societies	Liability	No. of Members	Capital in Shares marks.	Reserve Fund marks.	Year's Capital marks.	Fixed Capital marks.	Profits marks.	Losses marks.
Sale of tobacco	3	limited	354	10,547	12,558	362,999	37,123	2,488	60
" honey	2	"	83	2,255	630	7,280	—	987	—
" fruits	2	"	137	6,975	44,549	110,913	37,980	1,653	—
" fish	2	"	136	1,360	—	115,802	76,172	6	6,924
" vegetables	1	"	2,258	47,920	152,641	205,461	—	19,567	—
" eggs	1	"	32	64	251	451	—	32	—
" dextrine	1	"	7	51,254	4,535	72,453	67,000	2,997	—
" butter	1	"	?	9,800	17,561	279,651	234	2,736	—
" preserves	1	"	65	55,200	51,802	488,667	185,371	21,211	—
" dry leaves	1	unlimited	7	24,500	—	57,016	46,971	—	—
Mills	2	{ 1 " 1 limited	78	3,818	—	122,274	39,218	—	12,910
Aqueducts	4	"	213	22,735	752	116,388	98,475	340	175
Steam labour	1	unlimited	12	26,400	—	52,502	36,109	106	—
Horse breeding	11	limited	513	4,657	2,125	72,727	29,542	216	4,839
Pig	12	"	72	379	847	1,226	—	124	—
Bee-troot growing	1	"	24	120	640	760	—	102	—
Shepherds' societies	6	"	261	29,312	2,214	490,000	454,733	6,120	130
Artisans'	6	"	197	53,718	32,240	522,287	163,289	13,494	—
Consumers'	9	{ unlimited 7 limited	1,749	36,434	47,067	159,843	11,376	20,285	44
Colonization	6	"	588	90,358	86,372	901,946	455,871	5,529	6,134
Building	4	"	260	37,734	2,224	346,936	267,710	3,359	—
Various	14	"	2,017	1,226,621	606,397	8,980,378	870,510	200,770	70,445

Five selling, sixteen labour and twenty-seven various co-operative societies did not report.

AUSTRIA.

THE CO-OPERATIVE OILMILLS IN DALMATIA.

SOURCE:

ZMAVE (A.) *Die Oelbaugenossenschaften in Dalmatien-Oesterreichische Landwirtschaftliche Genossenschaftspress*, Vienna, 15 and 29 April, 13 and 27 May 1915.

GENERAL REMARKS.

There are sixteen co-operative oilmills in Dalmatia, but three of them are old societies without real vitality and we will here therefore treat of only thirteen.

The legal constitution of a co-operative oilmill entails the following formalities :

- 1) A meeting for the purpose of foundation which constitutes at the same time the co-operative society's first general meeting ;
- 2) A report of the foundation meeting and of the first general meeting ;
- 3) The drawing - up of by - laws ;
- 4) A scheme for a budget and for the amortization of the capital in shares ;
- 5) A joint declaration of adherence by the founder members ;
- 6) An enquiry as to the average annual production of the members ;
- 7) A request signed by the co-operative society for incorporation.

An *Union of Co-operative Societies (Zadružni savez)* has its premises at Spalato and Ragusa ; and the *Landeskulturrat* for the kingdom of Dalmatia has established at Zara a branch for olive oil, which is supported by the imperial and royal government and which has among other tasks that of selling on commission oil remitted to it for such purpose by the co-operative societies.

All the co-operative societies have the peculiarity that their by-laws oblige each of their members to belong to them for at least five years from the time at which they become active.

The following are the thirteen co-operative societies for the production of oil, placed in the order of the date of their foundation and first activity :

1908-1909 : Kali, Preko, Zmau.

1909-1910 : Igrane, Janjina.

1910-1911 Murter, Praskvica (which adhered to the Serbian Federation *Savez sepskih privrednih zadruga na Primorju* in Ragusa) Pučišće.

1911-1912 : Banj, Briso, Iž Veliki, Tučepi.

1912-1913 : Podgora.

The membership of all these societies has gradually risen from 200 at the end of 1908-1909 to about 1,300 at the end of 1913-1914.

Corporations — as for instance communal banks — are frequently among the members.

The members of the directing body and the superintending council are most frequently numerous — three to eleven ; but three to five would usually suffice. Almost always they are obliged to undergo a preliminary initiation in their functions, a precaution which has in several cases yielded entirely encouraging results.

§ I. CAPITAL OF INSTALLATION.

An oil co-operative society's capital of installation is generally considerable, being proportionate to the amount of oil which should without fail be produced, an amount which is not easily determined in advance. The almost complete lack of certain statistics with regard to the local production of the olive trees, and the realization of their value and of that of olive-oil, obliges recourse to valuations. The matter is complicated by another and weighty factor, namely the frequent desire of most olive-growers in the society's district to have actual proof of the society's good results before they decide to adhere to it.

It has been noticed that a small enterprise needs a relatively larger capital than one which is more important. The general statement may be made that in view of particular conditions in Dalmatia the total costs of installation should not exceed 150 crowns (1) per quintal (2) of the average quantity of oil annually produced. Thus a society producing on an average 50,000 kilogrammes (3) should invest in its own enterprise only $500 \times 150 = 75,000$ crowns. Approximate estimates show that each of the thirteen societies has on an average an annual total production of 4,000 quintals and an installation capital of more than 800,000 crowns, that is more than 200 crowns for each quintal. In recent years the average amount of oil produced has however been less than 2,000 quintals

(1) 1 crown = about $10 \frac{1}{12}$ d at par.

(2) 1 quintal = 220 lbs.

(3) 1 kilogramme = $2 \frac{1}{8}$ lbs.

owing to conditions unfavourable to the harvest and the marketing of the olives. It may be concluded that the amount of installation capital, which we have estimated at 200 crowns a quintal, has been more than doubled in the period in question and surpasses 400 crowns, which would represent an important and lasting increase in the expense of producing the oil, an operation lasting from forty to fifty days when it takes place in normal conditions. It seems however as though the heavy burdens now incident to the production of oil would give place to more favourable circumstances in the near future, if the olive harvest would but return to a normal level.

The costs of installation include in substance those incurred in acquiring a site and buildings (real estate), as well as machines, implements and other necessities.

All the thirteen co-operative societies except that of Banj possess mechanical motor power.

Most of the buildings have been specially erected for the production of oil, or at least they have been bought and adapted to their new purpose. In a few cases the communes have freely placed building land at the disposal of the promoters. It has happened that private individuals, themselves producers of olives, and desirous of adhering to a co-operative society or being among its founders, have seen in its formation an opportunity to speculate with their land. They have in consequence given themselves up to a blind propaganda in favour of its formation, without for an instant asking themselves if it would supply a general need.

The value of implements and machines is generally double that of real estate, but this relation varies with the number of the machines. The co-operative society of Banj, which employs only manual labour, has implements worth only half as much as its real estate.

The thirteen co-operative oilmills are insured against fire with the Agram co-operative insurance society called "Croatia" for a sum of about 700,000 crowns.

§ 2. GRANTS AND FACILITIES FOR CREDIT.

The State and the province make grants to the co-operative oilmills. Hitherto the State has paid them 400,000 crowns and the province 60,000 crowns, the total sum thus granted being equal to half their installation capital. The State's grant is in the form of annuities of from 2,000 to 5,000 crowns. As a general rule grants must be used for the amortization of debts and entered on the credit side of the societies' balance-sheets.

Two thirds of the State's grant are used to amortize debts incurred at the time of foundation; the other third goes to the working funds and may be used to cover working costs or meet a year's deficit. The same conditions apply to the provincial grant. If in spite of the grants the year's business still show a deficit, advantage is taken of the relevant by-laws, which allow

the proportional amortization of a deficit shown on the balance-sheet from the shares, if the ordinary reserve be insufficient to meet it.

The federation of the co-operative societies of Spalato decided some time ago that the credit granted to co-operative oilmills must not be more than double the amount of the paid-up shares. The total amount of the paid-up shares of the thirteen societies passed from 6,500 crowns in 1908-1909 to 65,000 crowns in 1913-1914. The amount of the unpaid-up shares is unimportant. The number of subscribed shares is still too small, averaging barely half of what it ought to be, namely 25 per cent. of the working capital. If the grants were for any reason diminished the capital in shares of the co-operative societies ought to be proportionately increased.

§ 3. THE OILMILLS.

In spite of their evident advantages there are great drawbacks to the oilmills supplied with mechanical motor power. Its employment is only advisable and permissible in the case of important enterprises suffering from a serious shortage of labour. Mechanical motor power is useful above all for the propulsion of olive-mills and hydraulic olive-presses for which considerable force is certainly needed. It would certainly sometimes be more profitable to small societies to use manual labour, an olive-mill being easily worked by animal power and hydraulic presses by hand. The method would render considerable economies possible, especially in years of bad harvest.

Moreover many co-operative enterprises for oil production would be entirely fitted to serve other ends than those of olive-growers. From the technical point of view it ought for instance to be possible to use their plant, when certain additions have been made to it, for realizing the value of grapes and wine. The fact that they generally possess mechanical motor power would allow a large threshing machine to be employed in them with profit; and one which was moveable would provisionally amply supply the needs of co-operative oil societies which also produce cereals. At present eight out of the thirteen societies grind cereals but only rarely in a scientific way. The society of Janjina has obtained the best results in this respect. As a rule the mills are used rapidly because there is a lack of experienced master-millers. The members of the co-operative societies are bound to use the co-operative mills exclusively. The home production of cereals is small, and the collective purchase of varieties of seeds suited to the country would be most advisable, the more so because the right to import free of customs-duties into Dalmatia is granted by the authorities or could be obtained from them. A cheaper, larger and better supply of bread could thus be secured, as has been proved by the experience of the well managed mills, and the food supply of the Dalmatian population would benefit indisputably. Various Raffeisen funds (*Seoske blagajne* or communal funds) which are active locally or in the neighbourhood have joined the co-operative societies for oil production as corporation-members, in order to give their

own members the opportunity of grinding their cereals in these societies' mills. At present the cost of grinding must not be less than two crowns for a quintal and must be paid immediately in cash. When competing mills exist already, co-operative mills should not be installed. Mills worked by hydraulic power are the least costly and those worked by a benzine engine the most costly. Those propelled by engines for heavy oil and gas aspiration engines cost less, but are not adapted to important mills needing great power. If electric power can be obtained on good terms an electric engine is preferable to any other.

§ 4. GENERAL RESULTS.

To resume: the production of olives and the preparation of olive-oil are undertaken by co-operative societies for this purpose, whose activity is constantly controlled by the section for olive-oil at Zara of the *Landeskulturrat* of the kingdom of Dalmatia. Sales are undertaken by this section in the capacity of an office for sales on commission. It directs, among other things, a central warehouse provided with all modern technical improvements and able to store from 4,000 to 5,000 quintals — that is 10 per cent. of the average total of a good harvest in Dalmatia. About one tenth of the Dalmatian production seems indeed to be organized co-operatively.

The costs of preparing olive oil — exclusive of those of producing the oil and the olives — vary much, their average being — according to the results obtained hitherto — about 5 crowns for 100 kilogrammes of olives or 30 crowns for 100 kilogrammes of oil, that is from 20 to 30 per cent. of the effective or market value of the oil. These costs might in time be reduced by a third or perhaps a half, given average olive harvests and their economical exploitation. The section for oils of the *Landeskulturrat* pays the co-operative societies advances on their oil, almost always at the rate of the market price of common oil, and writes off such advances against the money it eventually pays for the oil. The price has latterly varied from 85 to 100 crowns for 100 kilogrammes of oil.

The following table shows the importance and the results of realizing the value of the oil by a co-operative method. It should be remembered that the Podgora co-operative society for oil production has not yet delivered any oil, and also that the figures which show the oil circulated by the central warehouse, in the capacity of an office for sales on commission, are really higher by about a third than those in the table, because other associations and also individuals regularly deliver oil to be sold on commission on the same terms.

Year	1909-10	1910-11	1911-12	1912-13	1913-14	Total
Number of delivering co-operative societies. . . .	7	5	12	10	3	—
Quantity of olive-oil. . . .	632	1,487	2,304	2,344	85	6,852 q.
Gross product.)	94,848	186,613	331,719	341,724*	11,460*	966,364 K.
Costs.) Total . . .	1,841	13,572	53,268	46,880*	1,460*	117,021
Net product .)	93,007	173,041	278,451	294,844*	10,000*	849,343
Gross product.)	150	125	144	146*	135*	141
Costs.) for 100 kilo-	3	9	23	20*	17*	17
Net product .) grammes.	147	116	121	126	118*	124

NB. — Several co-operative societies delivered oil before their machines were completely installed for example in 1909-10.

* Estimated value.

CANADA.

RECENT SUCCESSES OF AGRICULTURAL CO-OPERATION IN CANADA.

SOURCES:

- ALBERTA CO-OPERATORS' ANNUAL (*Report of the Alberta Farmers' Co-operative Elevator Company*) in *The Grain Growers' Guide*, Winnipeg, 22 November 1916.
- SASKATCHEWAN CO-OPERATIVE ANNUAL (*Report of the Saskatchewan Co-operative Elevator Company*) in *The Grain Growers' Guide*, Winnipeg, 29 November 1916.
- THE GRAIN GROWERS' ANNUAL (*Report of the Grain Growers' Grain Company*) in *The Grain Growers' Guide* 6 December 1916.

§ I. INTRODUCTION.

The agricultural year 1915-1916 was exceptional in Canada in the three respects of the high yield, the quality of the crops and the high selling price of grain. These favourable conditions have allowed the three great co-operative organizations of the western provinces to develop their interior activity, to realize enormous profits, and consequently to gain an enormous amount of support in agricultural circles.

In the whole world there is nothing comparable to these three organizations — the Saskatchewan Co-operative Elevator Company, the Grain Growers' Grain Company in Manitoba and the Alberta Farmers' Co-operative Elevator Company. They include at the present moment more than 48,000 shareholders; the total sum of their assets exceeds \$8,000,000 (1) and their paid-up capital in shares is about \$2,000,000.

Last year 90,000,000 bushels of grain, or about a third of the total quantity produced in Canada for the market, passed through their hands. Their profits are represented by hundreds of thousands of pounds. The Manitoba Company realized last year a profit of \$775,000, the Saskatchewan Company one of \$757,000 the Alberta Company one of \$282,000. Their combined profits amounted therefore to \$1,814,000.

(1) \$ 1 = about 4s 1 1/2d at par:

This considerable sum returned in part to the producers themselves, as shareholders in the companies, in the form of dividends. In part it went to swell the reserve funds of the companies, thus allowing them to multiply and intensify their future activities on behalf of the farming class. A balance amounting to \$620,000 entered the coffers of the State in the form of a tax on profits.

The three companies now own or work more than five hundred local elevators. Including the buildings now in course of construction they dispose, or will do so shortly, of a storage capacity of more than five million bushels.

It is fair to note that the development of agricultural organization in the Prairie provinces is largely due to the perseverance and the sane commercial and financial methods shown in the management of the Manitoba Grain Growers' Grain Company. These were the best means of advancing the cause of union and co-operation among the farmers.

It is also apposite to recall that these companies enjoy no special privileges. They compete with the purely commercial companies, and the tariffs they apply to the handling of grain are fixed either by the Canadian Grain Commission or by the Winnipeg Corn Exchange, which control them. Their activity and their success are therefore the more remarkable and are proof of the excellency of their methods..

The figures representing profits which we have given are far from affording an accurate idea of the advantages which farmers derive from this organization. The departments for co-operative provision, which allow a farmer to procure the products and other foods he needs almost at cost price without the intervention of middlemen, mean an enormous economy to farms. Wood, wire, coal, rope, agricultural machines and tools are thus provided to their members by the companies in increasing quantities. The Manitoba Company has even bought vast extents of forest land in order to command the timber needed by its members, which it cuts down and markets itself. The sale of agricultural products other than grain by these companies is becoming increasingly important.

It is therefore not surprising that the report of the Manitoba Company concludes with a very promising forecast :

" If the shareholders and those whom they have placed in charge of the respective companies' business remain true to the principle and ideal which brought them into existence, they cannot fail to increase in the right direction their power and influence in the commercial life of Western Canada. While it is always dangerous to enter the realm of prophecy, it is not too much to expect that within the next ten years the farmers of Western Canada will be operating their own sawmills and their own flourmills, possibly their own coalmines and meat packing plants, and may be caring for their own fidelity and fire insurance ".

The decision taken at the respective general meetings of the Manitoba Grain Growers' Grain Company and the Alberta Farmers' Co-operative Elevator Company to merge themselves into a single company which will be known as the *United Grain Growers* represents a fresh step towards the uni-

fication of agricultural organization and co-operative action. The new combination will have a capital in shares of \$5,000,000. The eventual aim seems to be the concentration in one organization of all the three great companies of Western Canada, but hitherto the Saskatchewan Company has not considered the question of merging itself in the other two.

We will now give some exact data as to these three farming organizations, without further comment since the figures speak for themselves.

§ 2. THE SASKATCHEWAN CO-OPERATIVE ELEVATOR COMPANY.

The report submitted by this company's board of directors to the last annual general meeting, which was held at Regina on 22 November 1916, includes some very significant figures as to the business done and the profits realized.

The year in question was the fifth since the society's foundation. The authorized share capital was \$2,500,000; the share capital subscribed on 31 July 1916 was \$2,358,900; and the share capital paid up at this date \$627,342. From 1 April 1915 to 31 July 1916 approximately 211,000,000 bushels of wheat and 59,000,000 bushels of oats, barley and flax were despatched from Saskatchewan. The company handled altogether 43,198,000 bushels of grain, or about 15.8 per cent. of the total export. It loaded 4,109,000 bushels over the platform while 39,089,000 bushels passed through its 230 elevators. These figures are proof of intense activity. The total amount of grain which passed through its elevators in the first three years of the company's existence was surpassed in this single year. On an average 170,000 bushels — that is 68,000 bushels more than in the most active of previous years — passed through each elevator. One of them alone received 520,000 bushels. As a direct consequence of the enormous amount of business done the costs of handling the grain were lower than in previous years.

The grain stocks held on 31 July 1916 were valued at \$1,724,020.

Twenty-seven new elevators were built during the building season of 1916 and one was bought. Further in the beginning of last July the company began to build at Port Arthur in Ontario a terminal elevator which will have a tank capacity of 2,000,000 bushels and a workhouse capacity of 500,000 bushels. Additional units to provide a total storage extending to 16,000,000 bushels can be added as required; and the workhouse is designed so that it can give a total eventual storage capacity of 8,000,000 bushels. The building is to be ready on 1 September of this year and the estimated cost of the whole undertaking is \$1,225,000.

On 31 July 1916 the cost of construction up to date was \$2,024,272; and, allowing for depreciation, the assets in the buildings were valued at \$1,861,072. The advances granted on bills of lading amounted to \$530,476. Among the liabilities of the company at this date were the loan and interest, amounting to \$1,639,267 due to the government of Saskatchewan;

\$982,268, the amount of cash grain tickets and settlements due to the public; and \$199,479, being the war tax on business profits between 31 July 1914 and 31 July 1916 and due to the Dominion government. This tax amounts to 25 per cent. of all profits beyond 7 per cent. of the invested capital, reserves included, and should be paid on the profits of three financial years. The reserves amounted to \$322,973.

The profits of the year 1915-1916 show the growing importance of the enterprise. They amounted to \$757,275 which, when the war tax had been deducted, allowed of a dividend of 8 per cent. of paid-up capital on all shares allotted before 1 April 1916.

§ 2. THE ALBERTA FARMERS' CO-OPERATIVE ELEVATOR COMPANY.

This company was registered in virtue of a special Act of 23 March 1913 and is therefore of quite recent foundation. Its growth is clearly shown by the following table:

Date	Number of Elevators	Number of Shareholders	Number of Subscribed Shares	Subscribed Share Capital	Paid-up Share Capital
				\$	\$
August 1913	46	4,665	7,272	436,220	87,264
October 1914	76	8,483	9,428	555,680	117,108
November 1915	87	9,353	12,127	727,670	163,869
November 1916	103	11,236	14,472	868,320	301,737

The activity of the company's elevators is shown by the following figures:

Farming season	1913-1914	\$3,774,396	bushels of grain received in the elevators						
"	"	1914-1915	5,039,100	"	"	"	"	"	"
"	"	1915-1916	19,320,536	"	"	"	"	"	"
"	"	1916-1917 (3 months)							
		more than	600,000	"	"	"	"	"	"

The commission department, which dealt in 1914-1915 with only 1,211,000 bushels, dealt in the following year with 10,384,156 bushels and in the first three months of the current year with more than 2,000,000 bushels.

The live stock department which began its activity on 1 April 1914 has since accomplished the business shown by the following table :

Year	No. of Cars consigned	No. of Hogs	No. of Head of Cattle	No. of Sheep	Value
					\$
1913-1914	141	11,000	—	—	—
1914-1915	763	56,603	1,129	805	605,809
1915-1916	513	36,624	3,545	659	878,042
1916-1917 (3 first months)	258	6,712	3,493	1,502	305,846

The figures for all the branches of the company's work are equally interesting. In the first three years 59,222 and 160 carloads of flour and fodder for live stock and 33,150 and 372 carloads of coal were respectively provided ; and in the first three months of 1916-1917 796 carloads. The quantity of posts provided passed from 75 carloads to 204 in 1915-1916 ; that of twine from 55 carloads in 1914-1915 to 78 in the next year ; that of lumber and building material from 19 to 42 carloads ; that of wire from 13 to 23 carloads. In the first three months of the present season the company received for sale 40 carloads of fruit produced by members. Finally in these three months the co-operative department has delivered 1,003 carloads of hay, salt, firewood and other necessities, as against 96 in the farming season of 1913-1914.

The co-operative department, of which the principal business has been noted, handled altogether 1,002 cars in the thirteen months ending 31 August 1916 and its total turnover was \$749,668.

In order to meet the greatly increased demand for coal in the best possible conditions the company has begun to build coal-sheds at points where there are elevators and a demand among local shareholders. This has enabled an accumulation of large quantities of coal and the regulation of its price. The tentative enterprise has met with complete success, orders for 658 carloads to be delivered to farmers having been received on 15 November 1916, the date of the company's last general meeting.

The total amount of the company's assets on 31 August 1916 was \$1,509,496.

The profits for the year ending at that date were \$282,484, to which must be added a balance of \$36,229 from the previous year. Out of the total sum \$175,000 was paid into the general reserve ; a dividend of 8 per cent. was paid to the shareholders ; \$15,000 provided bonuses for the company's agents ; and the Dominion war tax absorbed \$60,000. A balance of more than \$23,000 remained to carry over to the next year.

§ 4. THE MANITOBA GRAIN GROWERS' GRAIN COMPANY

The year 1915-1916 was from almost every point of view the most satisfactory ever experienced by this company.

In its ten years of life this company has come to be very powerful. When formed on 1 September 1906 it could count certainly on only a few shareholders; on 31 April 1916 their number was 18,163. The paid-up capital has risen from \$5,000 to \$1,073,000. The profits of the first year were only \$790; last year they were more than \$570,000. The total quantity of grain which the company has handled in the ten years is more than 205 million bushels. The total profits amount to \$1,488,740 and the total dividends to \$550,000.

The volume of grain which passed through the company's elevators was, owing to the exceptional crop of a year ago, more than double that handled in the previous year, namely 14,737,687 bushels as against 6,540,923 bushels. In spite of this increase of about 125 per cent. the working costs increased by only 75 per cent.; the total expenses in this department being \$437,695 as against \$285,897 in 1914-1915. The total revenue was \$597,303 as against \$292,288 for 1914-1915. Thus this department obtained a profit of \$161,607 as against one of \$7,390 for the previous year.

The company now owns fourteen elevators in the province of Manitoba.

The co-operative department, by sales of machinery and other goods, realized \$1,363,591 as against \$1,148,128 in the previous year, which gives an increase of 19 per cent. The chief increase was under the head of machinery, of which the sales, those in Calgary being excluded, realized \$278,205 as against about \$80,000 in 1914-1915.

The sales of machinery at Winnipeg and Regina were made up as follows:

Tillage tools	\$102,044.13
Miscellaneous machinery and supplies	83,664.67
Gas engines	13,889.80
Tractors	36,191.39
Vehicles	42,415.79
	<hr/>
	\$278,205.78

The other principal sales effected by the co-operative department were as follows:

Lumber	\$180,410
Millwork	23,729
Metal goods	10,756
Builders' supplies	46,120
Twine	520,373
Barbed wire	70,136
Woven wire	53,336
Posts	46,419
Coal	53,249
Flour	8,488
Apples	69,946

These sales realized altogether \$1,085,385. The total operations of the co-operative department yielded only a slight profit. The necessity of accumulating large stocks in order to meet demands punctually and to guard against the rise of prices due to the war placed the company in some difficulty.

A live stock department was formed during the year. Sales began on 1 March 1916: at the end of August 1916 carloads of live stock had been handled, and the number handled in September and October was 302. This department is doing educational work in that it shows farmers how to form live stock shipping associations and make the greatest possible profit out of their stock.

The total expenses of all kinds amounted in 1915-1916 to \$994,997 and the gross income to \$1,566,422. The profit and loss account gives a balance of \$572,804, utilized as follows:

Dividend of 10 per cent.	\$100,500
War tax 1915-1916	104,381
Reserve	217,159
Carried over	150,763

On 31 August 1916 the amount of the reserve fund was \$600,000. Among the assets invested capital amounts to \$801,950: \$225,682 of this sum being invested in growing timber, and more than \$300,000 in town real estate, while the elevators are valued at more than \$250,000.

There is no doubt that the company is in an excellent position financially. Since it was founded its shareholders have always received a 10 per cent. dividend except in the first year when the dividend was 7 per cent. The shares have risen to 50 per cent. above their nominal value.

§ 5. THE FUSION OF TWO GREAT FARMERS' COMPANIES.

At the annual general meeting of the Manitoba Grain Growers' Grain Company, held at Winnipeg on 29 November 1916, a very important resolution was passed which marks a turning-point in agricultural organiza-

tion in Canada. On the proposal of the board of directors the shareholders agreed to the fusion of the company with the Alberta Farmers' Co-operative Elevator Company. The resultant company is known as the United Grain Growers, Limited.

For some years the means of advancing the interests of farmers in the vast region of the west, by grouping together their organizations and thus improving the working of these, had been studied. A year ago an attempt was made to federate the three great companies of which we have spoken, but this was a failure. The board of directors of the Alberta company thereupon proposed to merge their company and that of Manitoba. The detailed steps by which this measure was accomplished were approved by the shareholders of the Alberta company three weeks before the meeting of the Manitoba company.

In accordance with the scheme which was approved the Manitoba Grain Growers' Grain Company will be reorganized on a new basis, that namely of local groups which has already been adopted by the Alberta and Saskatchewan companies.

Each of these local groups will name delegates who will be sent to the general meeting and whose travelling costs will be paid by the company. The shareholders will therefore be much better represented in the general meetings than is the case under the system hitherto followed ; under which the large majority of shareholders present at the general meetings have been resident within a radius of from sixty to a hundred miles of Winnipeg, although the shareholders living in Manitoba are much less than half their total number, 7,500 living in Saskatchewan and the others in Alberta and British Columbia.

The capital in shares of the new company will be \$5,000,000

Its by-laws will shortly be presented for statutory sanction to the parliament at Ottawa.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH INDIA.

THE PROGRESS OF CO-OPERATIVE SOCIETIES IN BARODA STATE.

The report of the registrar of Baroda State for 1914-15 shows a very considerable progress made by co-operative societies. The following table gives some details:

Kind of Societies	No. of Societies		No. of Members		Working Capital	
	1913-1914	1914-1915	1913-1914	1914-1915	1913-1914	1914-1915
					Rs. (1)	Rs.
Central	3	2	176	220	128,170	184,062
Agricultural	246	286	6,918	8,071	452,006	536,439
Non-agricultural	13	18	655	976	59,660	79,719
Total	262	306	7,749	9,267	639,836	800,220

(1) 1 rupee = 15 *ad.*

The registrar states that except in a few places no special efforts were made to organize new societies, but that the people came forward of their own accord, being generally influenced by the successful working of a society in their neighbourhood.

The reserve fund of all the societies amounted to Rs. 69,584 as against Rs. 44,500 in the previous year. The amount of loans granted was Rs. 586,566, having increased in the year by Rs. 73,358. Nearly one third of the loans were made for such ordinary agricultural purposes as the purchase of seed or manure and the payment of labourers' wages. Others were for the purchase of cattle and implements, the payment of land revenue and old debts, and trading, industrial and domestic purposes.

The non-credit societies include a milk supply society which supplies milk to a depot in the town, a milk consumers' society which distributes this milk to residents in the town, and an agricultural society which supplies water for purposes of irrigation.

The eighteen non-agricultural societies include five government servants' credit societies, eleven weavers' societies, a municipal scavengers' society and another society of this last type.

The registrar acknowledges great help received from the officers of the Revenue Department who were asked, by a special resolution passed by the Honourable Council, to forward the movement.

"If", he states, "the co-operative movement is to be developed, well organized efforts should be made to educate the farmers in the principles of co-operation. A hand-book on co-operation for use in primary schools has been prepared".

ITALY.

1. THE RESOLUTIONS OF THE NATIONAL MEETING OF THE AGRICULTURAL CO-OPERATIVE SOCIETIES AT MILAN. — *La Cooperazione Italiana* (Italian Co-operation), organ of the *Lega Nazionale delle Coöperative* (National League of Co-operative Societies), No. 1223, 22 December 1916.

On the initiative of the National League of Co-operative Societies there were held at Milan on the 17th and 18th of last December three national meetings of the co-operative societies of consumption, production, labour and agriculture (1). The last-named, which interest us most directly, dealt with agricultural and co-operative colonization, in relation to which the following motion was approved: "1) The meeting reaffirms its preceding resolutions in favour of giving a legal sanction, where the lands of public bodies are concerned, to letting these, on lease or otherwise, or selling them by preference to labourers' co-operative societies, such preference being analogous to that given to co-operative labour societies in public auctions, 2) The meeting declares the need to be urgent and immediate for public works of hydraulics destined to increase the area of land permitting of cultivation and to remove one of the more important causes of ill health and of the abandonment of much land. It demands also that there should be agricultural enterprise — internal colonization — the words being understood in their largest sense. The extension of the legislation for the Roman Campagna to all lands in which there is public agricultural enterprise is the first and fundamental action which the meeting demands

(1) A few days earlier at Naples the meeting of the co-operative societies of the south was held, and passed resolutions for the constitution of provincial or district federations of the various kinds of co-operative societies, which should help these societies in matters of technique, book-keeping or administration, or legally.

that the government should take, requisitioning uncultivated land and bringing it within such extension. 3) The necessity of increasing agricultural production, the need for employing on agriculture much of the labour which in the past emigrated, and the recognized opportunity for reconstituting collective agriculture show the close relationship between internal colonization and co-operative labour and production (collective farms). Thus wherever the private capitalist might withdraw, because profits were scarce or non-existent, the association of labourers, which would aim above all at a large gross return to be directly consumed by its members, would have every opportunity to enter and to intensify agriculture. 4) The meeting asks that a large part of the lands which will gradually be bought up, be given to the agricultural co-operative societies. These involve a minimum initial cost, and afford, as compared with land settled for centuries, more employment for labour, and employment both more and more lastingly remunerative. For this end the meeting passed a special resolution addressed to the government and the competent bodies. 5) The meeting considered that for the social and economic ends towards which the collective farms were directed, joint and divided management of the lands taken over were equally to be recommended, so long as under one and the other system more intimate and fruitful association linked individual to social activity and vice versa, and so long as there were no lack of technical knowledge or of credit. The essential point was that the land should be given to the labourers, who always had cultivated it and who would cultivate it more and better, for themselves and others, on the day on which they would by their associated efforts derive from it a larger profit". An order of the day was then approved by which, since the movement for agricultural co-operation was assuming in Italy a steadily growing importance, the National Institute of Credit for Co-operation (*Istituto Nazionale di Credito per la Cooperazione*) was invited to form an agricultural office which should co-ordinate and direct the action and development of agricultural co-operative societies among labourers. In accordance with this vote such an office has already been founded (1) by the institute at Bologna and aims at giving assistance and technical advice to these societies.

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2. THE COLLECTIVE FARM OF SAN GIOVANNI IN CROCE. — *La Cooperazione Italiana*, Milan, no. 1220, 1 December 1916.

The peasants of San Giovanni in Croce (Cremona), a centre in which class organization, completed by a consumers' co-operative society, has had a noteworthy development, have recently formed a collective farm, undertaking the management of about 800 Cremonese perches (2) of land belonging

(1) See *La Cooperazione Italiana*, Milan, no. 1225, 5 January 1917.

(2) 1 Cremonese perch = 966.45 square yards.

to the Educational Institutes of Cremona, at a fixed rent of 16.50 liras (1) the perch. To provide live and other stock — more than fifty heads of live stock have already been acquired — the Society has advanced more than fifty thousand liras. The work which will be collectively directed, will be executed mainly by casual labour supplied by the members. Only two families have been engaged permanently, and they will have to attend principally to the management of the live stock.

The direction of the work is entrusted to an expert, chosen from among the members, who will manage the farm "according to the criteria of the most rigid scrupulosity".

Wages will be fixed according to the contracts locally customary, all rules as to insurance against accidents, disablement and old age being especially observed.

The administrations of the religious bodies of Cremona have decided to substitute, whenever any of the leases of their landed property expire, a co-operative society of cultivators for the individual farmer. Thus in this province there is a distinct movement towards collective leases, which should meet with the success obtained by similar enterprises in the provinces of Ravenna, Reggio, Emilia, Mantua.

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3. THE "SOCIETÀ ANONIMA COOPERATIVA PER L'ESPORTAZIONE DEI PRODOTTI AGRICOLI" (2) OF JESI IN 1915-1916. — Report for 1915-1916 approved by the general meeting of members on 25 June 1916. Jesi, 1916.

This society has two sections, one for the export abroad of agricultural products, the other for the acquisition and the sale to members of articles useful to agriculture. In 1915-1916 it sold merchandise having an aggregate value of 931,850.66 liras, distributed as follows:

Chemical manures	liras	498,842.55
Meadow and various seeds.	"	258,732.87
Anti-cryptogamous substances.	"	130,658.96
Agricultural and various machines.	"	24,308.68
Fodder for live stock.	"	19,307.60
		<hr/>
Total	liras	931,850.66

(1) 1 lira = 9 $\frac{3}{4}$ at par.

(2) Limited Liability Co-operative Society for the Export of Agricultural Products.

As regards the section for export this could not discharge its function owing to the embargo on foreign export. The cauliflowers produced were however sold at home in the markets of Upper Italy, to which 715,790 of them or 85 car-loads, having a total value of 60,534 liras, were sent. In the same year a new dryer for cocoons was installed by the society, so that the two driers which now exist fully satisfy the demands of members. The society's sales have increased steadily, having realized in 1910-1911 a value of 148,369 liras, in 1911-1912 one of 850,976 liras, in 1912-13 one of 1,112,959 liras, in 1913-1914 one of 1,295,731 liras, and in 1914-15 one of 1,234,136 liras.

The society's capital reached at the end of the year in question 159,218.82 liras, made up as follows: capital in shares 84,250 liras; ordinary reserve fund 55,540.49 liras; extraordinary reserve fund 19,428.33 liras. The net profits — 55,468.80 liras — were distributed as follows: a) to the shares 5 per cent. of the paid-up capital, 4,205.90 liras; b) to the ordinary reserve 70 per cent. of the residue, 35,884.66 liras; c) to the purchasers 20 per cent., 10,252.76 liras; and finally d) 10 per cent. was set aside to provide for new initiative, 5,126.38 liras.

The society was able to reach such results thanks to the help obtained from local credit agencies, particularly the *Banca Popolare Cooperativa* (Popular Co-operative Bank).

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4. THE ACTIVITY OF THE OFFICE OF LEGAL ADVICE OF THE "LEGA NAZIONALE DELLE COOPERATIVE". — *La Cooperazione Italiana*, organ of this league, Milan, no. 1225, 5 January 1917.

Among the multiple services rendered by this Milanese National League of Co-operative Societies to its federated societies one of the best organized and certainly the most useful is that of affording legal advice. This service is entrusted to an expert who has summarized the activity of his office in the following table:

Year	No. of Affairs dealt with	Written Opinions	Oral Consultations	Local Enquiries	News-paper Articles	Co-operative Societies					Mutual
						Consumption	Labour	Agricultural	Building	Mixed	
1912	1316	1097	160	—	51	770	293	37	58	37	127
1913	1247	1068	179	—	—	628	371	—	68	—	137
1914	1269	1103	139	10	17	634	296	86	38	86	157
1915	1168	969	176	7	23	534	319	43	73	—	142
1916	859	744	100	—	15	365	204	37	45	—	93

It is seen that in spite of the difficulties of the present time the National League of Co-operative Societies neglects nothing in order to continue its work of helping and safeguarding the interests of these societies which now number more than 7,000.

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5. THE FORMATION OF THE "SOCIETÀ DEGLI ENOTECNICI ITALIANI". — Communicated by the Society.

On the basis of the votes of the National Congress of Experts in Wine, held last summer at Voghera, this "Society of Italian Experts in Wine", has been definitely formed. It has headquarters at Caselmonferrato and is intended to include all licentiates of the higher technical schools of wine production in Alba, Avellino, Cagliari, Catania and Conegliano. The society's aim, beyond that of defending trade interests, is to promote and favour the technical and economic progress of viticulture and wine production in Italy, where these industries represent more than seven thousand million liras of invested capital and employ more than two million citizens.

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6. THE DEVELOPMENT OF THE "UNIONE COOPERATIVA DI MILANO". — *Storia dell'Unione Cooperativa*, Milan, Tipografia dell'Unione Cooperativa, 1916.

This "Co-operative Union of Milan", the greatest consumers' co-operative society in Italy, has recently completed its thirtieth year of life. To celebrate the occasion it has published an interesting report which treats of its first origins and, year by year, of its work, its initiative and the results it has obtained. The facts are resumed in the following table, taken from the report :

The Growth of the Co-operative Union of Milan.

Year	Members	Paid-up Capital	Reserve	Total Sales	Credit Balance
	Number	Liras	Liras	Liras	Liras
—	396	7,941.00	—	7,005.98	1,058.16
1887-1888	613	29,908.00	1,600.25	35,013.77	10,575.73
1888-1889	874	138,261.00	6,503.27	231,026.91	24,836.03
1889-1890	2,127	378,812.00	18,758.34	681,539.01	82,250.50
1890-1891	3,412	687,150.00	39,860.09	1,397,475.02	141,414.37
1891-1892	3,761	828,053.00	82,917.02	2,462,571.52	168,653.23
1892-1893	3,910	909,343.00	129,609.65	2,741,932.68	182,473.50
1893-1894	3,938	918,362.00	162,358.51	2,949,770.76	197,266.62
1894-1895	4,083	935,312.00	221,276.27	3,254,531.04	216,275.75
1895-1896	4,292	1,004,960.00	273,974.39	3,678,145.69	249,273.11
1896-1897	4,556	1,107,800.00	362,334.18	4,765,115.28	300,379.18
1897-1898	4,867	1,225,163.00	439,612.20	4,908,920.01	314,783.77
1898-1899	5,053	1,344,836.00	520,134.25	5,217,653.08	218,811.90
1899-1900	5,164	1,447,581.00	580,962.80	5,755,519.01	295,336.23
1900-1901	5,270	1,541,149.00	635,076.54	6,297,567.16	310,646.67
1901-1902	5,389	1,637,025.00	689,960.68	6,546,707.98	310,288.30
1902-1903	5,632	1,766,333.00	780,988.44	6,713,256.96	324,768.27
1903-1904	7,365	2,217,574.00	936,533.10	7,025,128.07	345,049.93
1904-1905	9,188	2,840,755.00	1,180,417.00	7,388,420.89	426,502.22
1905-1906	11,481	3,848,609.00	1,454,252.35	8,375,827.64	522,162.20
1906-1907	12,958	4,738,124.80	1,799,879.02	10,467,999.00	689,162.25
1907-1908	13,880	5,486,599.05	2,091,120.01	10,279,885.49	656,799.86
1908-1909	14,114	5,733,474.95	2,240,574.35	10,570,376.96	650,760.89
1909-1910	14,306	5,923,756.40	2,373,297.97	10,891,623.33	726,447.28
1910-1911	14,566	6,193,854.44	2,565,770.90	10,732,609.00	632,601.51
1911-1912	14,582	6,313,431.20	2,687,571.76	11,001,337.23	651,083.17
1912-1913	14,526	6,343,241.90	2,732,171.56	11,089,710.95	549,719.48
1913-1914	14,825	6,282,998.60	2,488,482.67	10,554,268.29	409,962.02
1914-1915	15,004	6,301,739.89	2,396,619.80	10,887,895.23	251,791.59
1915-1916	15,087	6,294,705.64	2,425,735.20	14,896,397.77	621,579.41

The total profits realized in the period considered amounted to 10,482,713 liras, distributed as follows: interest, 4,765,143 liras; reserve

1,018,297 liras; savings 3,172,506 liras; administrative council 320,328 liras; thrift fund 1,087,060 liras; research fund, 107,407 liras.

The union occupies a building in which it sells stuffs, shoes, hats, linen, clothes, carpets, furniture, etc., and includes numerous guilds devoted to the various kinds of manufacture. It comprises forty-nine sections for the sale of the different kinds of food and wine, and five depots for combustibles. It possesses a great warehouse for wine, capable of receiving 50,000 hectolitres (1) and provided with the most modern and perfect machinery. It has premises for treating pig-flesh in which all such products sold in its various branches — amounting last year to a value of 773,036 liras — are prepared; and also a confectioner's shop, three restaurants, a printing-press and a book-bindery. In May 1914 it opened a new department — the deposit bank which has already received savings amounting to 575,629 liras, on which interest is paid at the rate of $4\frac{1}{2}$ per cent. Finally beside the gates of Milan it has made the Milanino, Italy's first garden-city.

The union recounts its activity in its own monthly review, *L'Idea Cooperativa*, which it distributes to its members without charge.

RUSSIA.

THE FINNISH SUPERINTENDING SOCIETIES IN THE YEARS 1913-1915. — *För landmannahem*: Helsingfors, September 1916.

The Administration of Agriculture has published a report on the activity of the Finnish superintending societies in the year 1915.

In 1915, 65,648 cows yielded on an average 1,926 kilogrammes (2) of milk each, furnishing 75.34 kilogrammes of butter (3.91 per cent); in 1914 the average yield of each of 60,589 cows was 2,017 kilogrammes of milk which furnished 77.85 kilogrammes of butter (3.86 per cent.); in 1913 the average yield of each of 43,392 cows was 2,085.6 kilogrammes of milk and 80.66 kilogrammes of butter (3.86 per cent.)

The largest gross yield occurred in the district of Lojo (Nyland province) where each of 437 cows gave on an average 3,251 kilogrammes of milk and 121.43 kilogrammes of butter (3.73 per cent.) for a consumption of 2,281 units of forage. In two other districts of the province of Nyland the average for one cow was more than 100 kilogrammes of butter: namely in the district of Ekenäs — 2,927 kilogrammes of milk and 106.38 kilogrammes of butter (3.65 per cent.) for a consumption of 1,983 units of forage; and in the district of East Helsing — 2,811 kilogrammes of milk

(1) 1 hectolitre = 0.344 quarters.

(2) 1 kilogramme = $2\frac{1}{8}$ lbs.

and 103.15 of butter (3.67 per cent.) for a consumption of 2,073 units of forage.

In the whole country 130.2 kilogrammes of milk were, on an average obtained for 100 units of forage in 1914 and 134.4 kilogrammes in 1913. Thus the production per hundred units has diminished, the diminution being accentuated within the sphere of certain societies. In 1915 the consumption of forage decreased almost universally and the forage consumed consisted in a larger proportion than previously of oil-cakes. These two circumstances prove that the efforts made to diminish the use of cereals as forage have not been fruitless. On the other hand the excessive restriction of the consumption of forage in some districts seems to have caused a decrease in production which is too large to be economically profitable.

Part II: Insurance and Thrift

URUGUAY.

THE STATE BANK OF INSURANCE AND INSURANCE AGAINST HAIL.

SOURCES:

RELACIÓN ENVIADA POR LA OFICINA DE ESTADÍSTICA Y PUBLICACIONES DEL MINISTERIO DE INDUSTRIAS DEL URUGUAY AL INSTITUTO INTERNACIONAL DE AGRICULTURA SOBRE LA SECCIÓN GRANIZO DEL BANCO DE SEGUROS DEL ESTADO, EN 7 OCTUBRE DE 1916 (*Report sent by the Office of Statistics and Publications of the Ministry of Industry of Uruguay to the International Institute of Agriculture on the Hail Department of the State Insurance Bank on 7 October 1916*).

LEY DE CREACIÓN DEL BANCO DE SEGUROS DEL ESTADO (*Law creating the State Insurance Bank*)
Talleres de A. Barreiro y Ramos. Montevideo, 1912.

REGLAMENTO GENERAL DEL BANCO DE SEGUROS DEL ESTADO (*General Rules of the State Insurance Bank*), *ibid.* 1912.

§ I. THE STATE INSURANCE BANK.

The State Insurance Bank was created by the law of 27 December 1911. Its object was to practise all forms of insurance covered by the State's monopoly and instituted by the relevant law.

The bank's capital consists of three million pesos (1) in public debt bonds bearing interest at the rate of 5 per cent. annually and 1 per cent. of amortization. The bank's capital and reserve fund are the special guarantee of its operations, which are however also guaranteed by the State

(1) 1 peso = about 4s 3d at par.

and for which the State is responsible. The reserve fund is formed by the bank's annual balance of liquid capital.

This bank's insurance transactions are exempt from all taxation, as is its real estate.

The State Insurance Bank is held to be incorporated and has therefore to exercise rights and fulfil obligations. Its legal headquarters and administrative centre are at Montevideo, but it may have agencies where it judges that their foundation is to the interest of itself and its clients. It is administered by a board of directors consisting of a chairman and six voting members.

The law already mentioned of 27 December 1911 declared that contracts for life insurance and insurance against fire and the accidents of labour were the State's monopoly, and that the State could also undertake insurance of other kinds, but must in every case and with regard to every class of insurance fix by decree the date at which its monopoly should take effect. In order to establish its monopoly in each branch of insurance the State may acquire the paper belonging to existing companies or agencies and substitute itself for them in respect of all their rights and obligations.

Already in its first year of activity, which ended on 31 December 1912, the State Insurance Bank undertook — in addition to the transactions covered by its legal monopoly of life, fire and accident insurance — other branches of insurance, among them one which has an especial interest for us, namely insurance against hail.

To insure standing crops against damage by hail an especial department has been formed in this bank, and it employs agents and a competent propaganda staff who are distributed throughout the country.

This department acts autonomously, as do all others in the bank, under the direction and control of the council, and in the short time for which it has been at work it has already given proof of singular activity, although hitherto agricultural conditions have in general been adverse. Before we briefly indicate the results it has obtained it will be well to show the principal terms of contracts for insurance of this description.

§ 2. TERMS OF A POLICY OF INSURANCE AGAINST HAIL.

For the period fixed in each contract the State Insurance Bank insures the value of standing crops, that is of products actually borne by plants which are still enrooted, against damage caused by hail, all damage due to causes preceding, accompanying or following on the fall of hail being expressly excluded.

Insurance is applied for in writing on the bank's forms, and the application is an integral part of the policy and must be accompanied by the amount of the due premium.

The bank becomes responsible for risks from midday on the day on which the policy is drawn up until the crops are cut or uprooted, within the period fixed in every case. No prorogation will be granted in the case of any crop within regions in which damage has been done by frost, or which have been invaded by winged locusts or threatened by them in their wingless state. In every case an insured person is obliged to provide the agricultural work which the character and the condition of his crops require and on no pretext to abandon insured crops. Anyone applying for insurance must insure all his crops of the kind which he proposes to insure. He must therefore, when applying, declare to the bank whether he has other crops of the same kind, which are uninsured or which are insured by the bank or otherwise. If a part of the crops which he desires to insure he in a bad state he may insure only such remaining part as is in a good state. The signatory of an application for insurance must therefore specify clearly, in the plan which he annexes to his application, what part of his fields he excludes from insurance and the area of that which he wishes to insure. After he has partially insured a crop he will be obliged to insure at the bank such excluded part thereof as may recover from its bad state. On pain of forfeiting his insurance he is bound not to cut that part of his crop which has for any reason been excluded from insurance, with the bank's consent, until that part of it which the bank has insured has been completely harvested. Crops insured by the bank may not be insured elsewhere without notification to the bank, even if several persons have an interest in them. When the bank has thus been notified it will have a *pro rata* responsibility, with the other agencies insuring a given crop at the time damage is incurred. When one crop is insured by several companies any damage incurred will be estimated by an inspector whom one of the interested companies will nominate.

If after an insurance contract has been concluded the insured crop pass into the possession of another person, the insured person will inform the bank in order that the fact may be noted on the policy. The application should contain a statement as to the total amount at which the applicant values the crop to be insured by the bank, wholly or partially as the applicant may desire.

Crops already damaged by hail may not be proposed for insurance until ten days have elapsed from the time at which the damage was incurred, and the applicant desiring to insure them must insert in his application a statement as to the amount of the past damage and the date at which it was incurred.

The insured person may not claim indemnities from the bank for damages due to hail unless these exceed in the case of each crop 6 per cent. of the total insured value. The notice of an occurrence of loss must state its date and hour and the kind of crop injured, and must be handed to the local agent and telegraphed to the management of the bank at Montevideo no later than twenty-four hours after such occurrence. This first notice will not however be held valid unless the insured person declare in writing,

on the bank's forms which are annexed to the policy and after a minute inspection, the value of the loss incurred, the state of the crops, etc.

This declaration must be given to the local agent for immediate transmission to the management at Montevideo, no later than forty-eight hours after the loss has been incurred. The insured person must exact from the agent for such notice and declaration a receipt which specifies the date and hour of their delivery.

Until the bank fixes the amount of the indemnity and agrees to grant it the insured person may not touch the damaged crops, on pain of losing all right to indemnification. If a crop have been damaged by hail at the time at which the grain was ripe the insured person will, failing the bank's order to the contrary, be obliged when he has made his declaration to harvest or continue to harvest the damaged grain, leaving however such ears standing as indicate the limits of the crop and form a basis for the bank's estimate.

In order that losses may be ascertained and estimated the bank, on pain of an annulment of insurance, insists on :

1. The presentation of the policy and the receipt for the notice and declaration of loss.
2. A declaration by the insured person or his representative, on the demand of the bank's inspector, as to the day and the hour of the inspection.
3. Exact proof that the injured crop is identical with the insured crop.
4. Detailed information as to :
 - a) when and how often the crops have been damaged by hail ;
 - b) whether the insured person's declared right to insure and his other declarations have been genuine ;
 - c) whether or not the work necessary to a good crop have been performed.
- 5) The exact determination of :
 - a) the area and situation of the damaged part ;
 - b) the yield which might have been obtained from the insured crops if they had ripened, until the time at which the loss occurred ;
 - c) the percentage of this yield destroyed by the hail.

The bank can in no case be responsible for more than the insured sum. If after one or more occurrences of recognized loss a part of the crops be again injured, the total damage will be estimated without taking into account previous estimates of loss ; and if the insured person have already been compensated for this loss or these losses, or the sum due for anterior losses have already been fixed, the sums so paid will be deducted from the total amount granted as an indemnity in accordance with the last estimate.

The bank has the right to commission one or more persons to inspect damaged crops once or oftener, or if necessary to delay inspection and valuation. The insured person must furnish the necessary facilities for inspection and the estimate of losses.

In case of lack of unanimity in the estimate of damage by the bank's inspector and the insured person, the former may choose as to whether experts will be nominated or the matter delayed until the harvest or later.

In the latter case the general yield of neighbouring crops will be taken into account, the average furnishing the basis for an estimate. If on the other hand it be decided to have recourse to experts, who will be commissioned to settle the dispute amicably, the amount of the loss will be fixed by two experts, the respective nominees of the disputing parties, and they will agree together on the basis of the terms of the policy. If they fail to agree the matter will be decided by a third expert whom they will nominate, unless they cannot agree on his nomination when decision will rest with one of three experts proposed to the insured person by the bank. The decision taken by the two experts, or failing them by a third, will be final and there will be no appeal against it, whether or not the third expert's decision agree with that of either of the two first.

The amount of the loss incurred will not be a matter to be discussed in the courts. The costs of an estimate which the two interested parties accept will be met by the bank. Honoraria and costs due to expert valuers and those deciding disputes will be reckoned separately, and should be partly paid by that disputant whose original estimate is furthest removed from the final estimate.

If an estimate of damage do not give rise to an indemnity, the insured person's claim not being justified, the insured person must pay the costs of inspection and the attendant travelling costs, which expenses must not ever be computed at less than forty pesos. The policy will be declared null and void and the amount of the premium ensured to the bank if the amount of such expenses be not paid within eight days in specie or by the remittance of a guaranteed note. If no agreement be reached as to the estimate, experts will be nominated to settle the dispute amicably or a second inspection will be made when the stipulated costs have been paid in advance.

The bank reserves the right to refuse an application for insurance within fifteen days of the date at which it is signed, returning in this case the amount of the premium. Similarly it may at any moment annul a policy after giving eight days' notice and returning the premium or a proportion thereof, the proportion retained corresponding to any losses sustained which it may have recognized.

§ 3. THE ACTIVITY OF THE DEPARTMENT FOR INSURANCE AGAINST HAIL.

The development of this department in the short period which has elapsed since its foundation is due not only to the exercise of a monopoly in insurance against hail, but also to the intensive propaganda which the bank's agents have carried out in the country in support of this branch of agricultural insurance. It has come to be almost twice as productive as it was formerly, when it was practised by private companies.

The private companies who covered this risk were "La Nacional"

and "La Rural". The bank bought their paper on 9 July and 9 September 1913, for 10,000 and 16,000 pesos, respectively.

The hail department was created in February 1912. As has been seen the monopoly in this form of insurance was instituted at the end of 1913, by means of the purchase of the paper of the private companies with which paper business was begun. The first results obtained were certainly most encouraging, the receipts of the hail department in the form of premiums reaching in 1912 61 per cent. of the product of this branch of insurance in the whole country, namely 47,463 pesos as against 30,000 pesos received by the private companies.

TABLE I. *Business of the Hail Department from 1912 to 1915.*

Year	Insured Capital Pesos	Premiums		Indemnities	
		Number	Amount Pesos	Total Amount Pesos	Percentage of premiums received
1912	1,537,029	1,543	47,463	8,977	19.22
1913	3,023,160	4,031	93,637	27,893	29.77
1914	1,065,697	1,618	43,271	10,259	24.63
1915	2,485,309	3,867	77,011	2,410	3.13
Total	8,111,195	11,059	261,418	49,539	18.95

This table shows the progress of the business of the hail department from 1912 to 1915, inclusively. But it would be difficult to estimate this institution's activity only from these figures. Thus as regards 1912, this year was, in the first place, that in which business was begun; secondly it was incomplete since the hail department was not founded until February; and lastly it was that in which the monopoly of this branch of insurance did not yet exist. After this monopoly was established in 1913 much higher figures were reached. It would however be very risky to accept the data for this year unreservedly as an index to the institution's activity in the matter of hail insurance; for it was in this year that the purchase of the paper of the companies, of which we have spoken, was effected, and the published statistics do not specify what revenue was obtained by the bank's department exclusively, and what emanated from these companies. The data in question therefore evidently indicate larger sums than would such as truly represented the department's activity in this year. The results obtained in 1914, the year of the application of the monopoly, which might have given us the normal level, are, on the contrary, furthest removed from it. The table shows that the figures for 1914 have undergone a considerable reduction as compared with those of other years. The

reason for this is that the meteorological conditions prevalent throughout the ordinary seed time of 1914 made the year quite abnormal. Very abundant atmospheric precipitations placed extraordinary difficulties in the way of agricultural work in several districts and entirely prevented it in others. All this brought about a general disturbance of agricultural production in its initial period, and prevented the hail department of the State Insurance Bank from the full activity which would have characterized it had sowing been effected abundantly and rapidly. On the other hand 1915 was distinguished in Uruguay by abundant agricultural production, especially of corn, and in consequence the business of the hail department was steady and prosperous. The data for 1915, as given in the table, may be taken most nearly to represent this institution's normal course of business, and thus it is possible to see the development accomplished.

Other considerations also follow on an examination of this table. If the amount of the premiums received be compared with that of the indemnities paid, it will be seen that when 30 per cent. has been deducted, as the amount of costs of administration, there remains an appreciable balance which hitherto has gone to swell the bank's precautionary fund.

Table II shows the sums assigned to the reserve fund of the hail department of the State Insurance Bank, the progress of which fund best shows the good working of the institution and the solidity of its business.

TABLE II — *Sums assigned to the Reserve Fund of the Hail Department.*

Year	Amount in Pesos
1912	5,653
1913	2,500
1914	19,000
1915	30,000

We end these brief notes on the activity of the Hail Department by Table III, which shows how the business of 1913 was distributed among the different kinds of crops insured :

TABLE III. *Distribution of Business among the various Crops insured in 1913.*

Crops	Cultivated Area	Area Insured by the Bank	Insured Capital	Premiums Received	Indemnities Paid
	Hectares	Hectares	Pesos	Pesos	Pesos
Corn	330,252	129,577	2,371,026	71,131	24,550
Linen	56,853	25,133	524,535	15,736	2,964
Oats	20,412	3,832	66,158	3,308	171
Canary Grass	930	494	15,237	609	56
Barley	1,389	274	5,132	256	—
Vines	6,103	179	43,872	2,633	172
Total . . .	415,979	159,489	3,025,960	93,673	27,293

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

ALGERIA AND REGENCY OF TUNIS.

THE CENTRAL ALGERIAN AND TUNISIAN FUND FOR AGRICULTURAL REINSURANCE IN 1915.

From the reports submitted to the extraordinary general meeting of 26 April 1916 we take the following figures as to the progress of the fund in 1915 :

1. *Insurance against Hail.*

	Francs (1)
Policies in force in 1915.	1,589
" " " " 1914	1,369
i. e. an increase of	220
Insured value in 1915	40,842,638
" " " 1914	34,332,502
i. e. an increase of	6,510,136
Assessments in 1915	582,158
" " 1914	548,785
i. e. an increase of	33,373

The cases of payment of indemnities numbered 317 and their amount was 1,162,938 francs.

2. *Insurance against Mortality among Live Stock.* — For the fifteen federated funds for insurance against mortality among live stock the results for 1915 were as follows :

Number of policies	197	
Value of insured animals	1,193,475	francs
Assessments.	33,388	"
Indemnities.	28,186	"
Percentage of assessments constituted by indemnities.	84	%

(1) 1 franc = 9 ³/₈ d at par.

3. Insurance against Fire.

	1912	1913	1914	1915
Number of policies	342	1,086	1,192	1,495
	francs	francs	francs	francs
Insured value	5,488,043	19,112,523	23,899,851	37,364,682
Net assessments	45,592	146,788	174,262	281,419
Indemnities paid	31,938	83,147	83,454	120,245
Percentage of assessments constituted by indem- nities	70 %	57 %	48 %	43 %

FRANCE.

THE MUTUAL AGRICULTURAL FIRE INSURANCE SOCIETY OF THE EAST ON 1 JANUARY 1916. — *Annales de la Mutualité et de la Coopération agricoles*, Paris, single issue of 1916.

On 1 January 1916 the Mutual Agricultural Fire Insurance Society of the East reinsured 849 communal funds, distributed among the funds of the district as follows :

Haute-Marne	438
Vosges	131
Jura	76
Haute-Saône	73
Meurthe-et-Moselle	62
Doubs	52
Saône-et-Loire	17

The number of these communal societies increased progressively, influenced by the great advantages they afford to agricultural labourers. The following table shows this development, of which the regularity is worthy of emphasis :

On 1 December	1905	10 societies
On 1 January	1906	115 "
"	1907	425 "
"	1908	502 "
"	1909	560 "
"	1910	637 "
"	1911	762 "
"	1912	778 "
"	1913	815 "
"	1914	848 "
"	1915	849 "
"	1916	849 "

The number of members effectively insured is proportionate to the number of policies, which has successively reached the following levels :

On 1 January 1906	21 policies
» 1907	1,824 »
» 1908	3,522 »
» 1909	5,325 »
» 1910	7,191 »
» 1911	9,492 »
» 1912	12,140 »
» 1913	14,617 »
» 1914	17,252 »
» 1915	19,536 »
» 1916	21,143 »

The capital guaranteed by the mutual society has increased like the number of the insured, that is to say in proportion to the subscribed policies. This capital, which is the chief asset of the 20,000 members, reached annually the following amounts :

On 1 January 1906	283,100 fr.
» 1907	14,901,025 »
» 1908	29,592,477 »
» 1909	44,436,428 »
» 1910	60,872,485 »
» 1911	79,944,485 »
» 1912	101,742,995 »
» 1913	123,585,836 »
» 1914	146,113,616 »
» 1915	168,186,436 »
» 1916	184,829,266 »

The net premiums received were as follows :

In 1905	45.75 fr.
In 1906	12,673.25 »
In 1907	32,658.75 »
In 1908	50,467.58 »
In 1909	68,338.95 »
In 1910	89,120.12 »
In 1911	112,841.40 »
In 1912	138,890.86 »
In 1913	164,435.60 »
In 1914	188,853.60 »
In 1915	207,573.30 »

The amount of indemnities paid for fires was :

In 1905	0.00	fr.
In 1906	11,543.70	»
In 1907	25,257.40	»
In 1908	39,287.80	»
In 1909	20,485.45	»
In 1910	36,656.45	»
In 1911	61,387.50	»
In 1912	43,069.25	»
In 1913	68,875.50	»
In 1914	150,573.30	»
In 1915	94,133.94	»

ITALY.

1. THE PROPOSALS OF SENATOR CONTI'S LAW FOR COMPELLING THE INSURANCE OF LAND AGAINST THE ACCIDENTS OF PEASANTS' LABOUR. — *Senato del Regno. Legislatura XXIV 1st session 1913-1916. Documenti* : no. 317.

In the sessions of 12 and 16 December 1916, that is to say almost simultaneously, two proposed laws for rendering insurance against the accidents of agriculture compulsory were considered and developed in the Senate and the Chamber of Deputies (1).

One of these is due to the initiative of the deputies Borromeo, Venino and Belotti, the other to that of Senator Conti. We have already dealt with the former (2). Although the ideas of the proposer of the second scheme are fortunately already well known we will recall its basic principles :

(1) In connection with the problem of insurance against the accidents of agricultural labour the General Confederation of Labour recently passed the following order of the day : " The directing council of the General Confederation of Labour affirms anew its previously expressed wishes as to the necessity of a complete insurance of labour against sickness, disablement and old age, in order to complete the accident insurance. The council asks the government to promulgate the promised law as to agricultural accidents, and in it to take into account the chief desires expressed on various occasions by the organizations, namely : a) that insurance be compulsory and protect without distinction all labourers on the soil and all agricultural enterprise attaching to it, including small proprietor cultivators ; b) that the right of agricultural labourers to insurance against temporary disablement be recognized ; c) that the insurance be entrusted to mixed and obligatory unions and completed by reinsurance with the National Accidents Fund ; d) that when the law as to agricultural accidents is promulgated labour be given juster representation on the council and committee of the National Accidents Fund .

Other desires for compulsory insurance against agricultural accidents were recently formulated in the meeting of representatives of the organization of the agricultural labourers of the province of Reggio and Emilia — who asked that such insurance should be entrusted to the National Accidents Fund — and by the agricultural commission of the League of Socialist Communes.

- (2) *International Review of Agricultural Economics*, June 1916, pp. 61 et seq.

1) Insurance against the accidents of labour is made a burden on land as constituting an inherent obligation of proprietorship. But this principle is neither absolute nor general. Exceptions are made in favour of a property held on lease, in the case of which the obligation and liability to insure devolve on any lessee who has undertaken cultivation in which the proprietor is not interested.

2) Insurance is entirely the responsibility of the proprietor if he cultivate his land or realize its value directly. It is the responsibility of the lessee if the land be let. If the land be granted on the system of *métayage* or another profit sharing system, the costs of insurance are divided between the proprietor and the occupier or *métayer*, the division being equal if products be shared equally. If all products be not shared exactly equally, two thirds of the insurance premium are charged to the landowner and one third to the *métayer* or occupier.

3) Insurance, saving in the exceptional cases enumerated under 4), is applicable without distinction to all agricultural labourers, including the peasants — men and women — who are constantly or temporarily employed on any work indispensable to tilth, agricultural production and farming, including such works as, owing to their necessary connection with and dependence on the production of a property, cannot be considered to be other than agricultural, and those habitually or exceptionally practised in dwellings, farms, dairies, presses, cellars, cisterns, and every other kind of labour of an agricultural character, if it be indispensable to tilth and agricultural production.

4) Insurance is not compulsory for peasants of either sex under thirteen and over seventy years old. Such peasants if employed on works already contemplated by the law on accidents in industries and enterprises (unified text of 31 January 1904 no. 51) will still be insured according to the terms of that law.

5) There can be no indemnifications except in the case of accidents which result in death or permanent disability, entire or partial, due to a traumatic cause consequent on work.

6) Notice must be given of every accident by the victim or his family, within five days of its occurrence, to the owner or lessee of the property. If such notice be not thus given the injury will be taken not to have been caused by the work,

7) A workman who is the victim of a simple accident must, if requested to do so by the insuring establishment, remain in a hospital for the time needed to determine the causes of the accident, in order to hasten his cure and diminish the accident's consequences. If he refuse unjustifiably to do this he loses his right to any indemnity.

8) The amount of the indemnity is 2,500 liras (1) in the cases both of death and of permanent and absolute disablement, but in the case of death it is reduced to 1000 liras if the deceased be not married and have no family to maintain, and is paid to his heirs.

(1) 1 lira = 9 ²/₈ d. at par.

9) A request for the revision of an indemnity is not acceded to unless it be proved that the first payment was made erroneously or unless the victim's physical condition be further modified as a result of the accident. Such request may be made only once, and not earlier than three months — or one month in the case of a death — after the payment of the indemnity.

10) Action to obtain the indemnity must be taken within six months after the occurrence of the accident as determined by the certificate and the judgement of the magistrate.

11) The principle of free choice of an insuring establishment is maintained. It is included in the law already mentioned, as to the accidents of industrial labour.

12) The extent of the property in relation to its various crops, all of which must be mentioned and classified in the rules, is taken as a basis for fixing the insurance premium.

For small properties having an area of less than half a hectare (1) the premium is halved.

13) The determination of disputes as to the nature and the importance of the consequences of an accident is reserved to a college of arbiters.

* * *

2. THE MUTUAL INSURANCE OF LIVE STOCK INTENDED FOR BUTCHERY. —

A. PIROCCHI in *La Mutualità Agraria*, no. 30, Rome, 30 November 1916.

In Italy since the law on sanitation of 22 December 1888 has been applied, an attempt has been made to compensate for losses consequent on the sequestration of butchers' meat, by insuring the animals with associations constituted on the principle of mutuality, by forming municipal insurance associations, or by insuring them with private joint stock societies. A great association formed for this purpose was active in North Italy, but failed and went into liquidation. On the other hand small societies, each of them active in a more or less limited sphere, as for instance a slaughterhouse, have had better results. The most important of these are the slaughterhouses of Milan, Turin, Rome, Mantua, Bergamo, Bologna, Florence and Naples. It will certainly be useful to show the organization and results of one of them, that of Milan, the growth of which is apparent from the following figures.

(1) 1 hectare = 2.47 acres.

Year	No. of Members	Receipts liras	Expenditure liras	Indemnities Paid liras	Annual Profit liras
1902 . . .	25	154,896.35	114,896.35	98,271.20	40,000.00
1903 . . .	—	155,372.93	127,864.41	102,150.78	27,508.52
1904 . . .	—	153,364.35	124,854.05	101,355.09	28,510.30
1905 . . .	—	188,384.50	170,168.55	140,304.46	18,215.95
1906 . . .	—	191,174.09	166,868.24	139,670.37	24,305.85
1907 . . .	—	196,237.57	158,022.52	132,311.90	38,215.05
1908 . . .	—	187,498.82	167,079.23	141,286.45	20,419.59
1909 . . .	—	173,892.97	149,235.96	116,624.23	24,657.01
1910 . . .	265	179,156.02	150,093.78	124,643.90	29,062.24

This association comprises butchers, live stock dealers and dealers on commission. The members undertake to insure with the society all their live stock intended to be butchered. Insurance was at first limited to animals attacked by tuberculosis or anthrax but was extended to cover all animals sequestered in consequence of a statement that they were affected by any disease.

Premiums are fixed at the following rates : oxen, 1 lira ; foreign cows and bulls, 3 liras ; home cows and bulls, 5 liras ; thin oxen, 3.50 liras ; calves, 0.10 lira. The society's property is made up of admission fees, insurance premiums, the results of selling the remains of animals, interest on invested sums, repayments of expenses chargeable to insured persons and the reserve fund. The admission fee is 25 liras together with a premium annually determined by the members' general meeting, according to the amount of the reserve fund as shown by the last balance-sheet. The reserve fund is made up of a determined part of each year's balance, certain profits prescribed because they have not been withdrawn within a year of the day on which they became withdrawable, and premiums paid in addition to the admission fee. Indemnities are paid when a declaration of the sequestration is delivered to the slaughterhouse's veterinary office. From this moment the society becomes the owner of the animal, and is responsible for all tolls, costs of slaughter and destruction and knacker's fees.

The net profits are distributed as follows: one quota to the reserve fund (this was during the first two years 50 per cent. of the annual net profits); 3 per cent to the manager; 2 per cent. to the staff; the remainder to the members in shares proportionate to the premiums they have paid, if the amount of the sums repaid to them because of casualties do not surpass the total amount of the premiums.

The association is represented by the members' meeting, the administrative council and the manager. For the annual inspection of accounts there are three commissaries for the accounts and two deputies for them. To decide disputes there is a commission of five members of whom three do not belong to the society.

Such are the fundamental principles on which this association is organized and on which it works. It enjoys the favour not only of those interested in it but also of the communal authorities.

As for municipal insurance this has been profitably introduced in a voluntary form in a slaughterhouse of the Abruzzi, that of Aquila. It has two branches — insurance against losses caused by leprosy among pigs and against losses of cattle caused by ictherus, tuberculosis etc. The premiums for cattle are: 5 liras for milch cows, 1 lira for bulls, oxen and cows not belonging to a race of milch cows, and 0.60 lira for weaned and 0.20 lira for unweaned calves. For pigs the premium is 1 lira.

For each head of cattle the communal fund pays an indemnity calculated according to the weight of the four quarters at market prices, less 0.15 lira a kilogramme, in the case of milch cows and 0.10 lira in the case of other cattle. As for pigs the fund pays the amount of the animal's full price, less 5 liras in the case of a boar and less 12 liras in other cases. Animals for which indemnities have been paid of course remain the property of the communal administration. There are special provisions against frauds.

Lastly joint stock societies have also been constituted in Italy for this object. They are not numerous however and their activity is usually unimportant. One of them — perhaps the most important in virtue of the funds of which it disposed — was recently dissolved after having attempted to extend its sphere over most of the kingdom.

* * *

3. THE RULES FOR THE DISTRICT OFFICES OF AGRICULTURAL MUTUALITY. — *La Mutualità Agraria*, organ of the *Istituto Nazionale per la Mutualità Agraria*, no. 2. Rome, 20 January 1917.

Recently, as is well known, various district offices of agricultural mutuality were founded in Italy, at Turin, Genoa, Florence, Mantua, Reggio in Calabria and Palermo. The *Istituto Nazionale per la Mutualità Agraria*, which was the promoter of these offices, has now thought it opportune to draw up special rules for their use and the use of those which would gradually be formed in other districts. We resume the fundamental principles of these rules:

The constitution of a district office of agricultural mutuality is first of all accordant with an agreement between the local administrations and the National Institute of Agricultural Mutuality already cited. This agreement specifies the method of working. Its aim is:

a) to multiply mutual funds for insurance against mortality among live stock, to assist their administrative and technical installation, and to give them an impulse to federation and reinsurance;

b) to disseminate, especially among small farmers and small proprietors, knowledge of the hygiene of rearing live stock and the use of association with a view to zootechnical improvement;

(1) 1 kilogramme = 2.2 lbs.

c) to popularize the rules for the constitution and the good working of co-operative and mutual institutions (mutual insurance against losses from hail, fire, accidents of labour etc.), and to disseminate thrift and popular education in the country;

d) to organize carefully the collection of complete statistics as to mutual societies and data relative to their working.

The action of the office extends into every district and is exercised; 1) by oral propaganda, 2) by the circulation of pamphlets of propaganda, 3) in pursuit of its aim, that of determining the formation, installation and administrative control of mutual societies. It will enter into relations with the itinerant chairs of agriculture and the authorities and institutions which can best assist its action.

The resources necessary to its work are formed of the quota paid for participation by the institutions belonging to it (provinces, communes, savings funds, popular banks, agricultural unions, etc.) by the State's contributions and by other eventual receipts. The work of the office is directed by a managing committee composed of five members chosen from the delegates of institutions making grants and from the best known local persons, besides the representatives of the Ministries of the Interior and of Agriculture. This commission chooses from its own number a president, a vice-president and a secretary. Its task is to see that the funds, of which we have already spoken, are regularly employed. The office is entrusted to the care of a director, who should be a specialist in agricultural subjects or a veterinary surgeon and who is nominated by the National Institute of Agricultural Mutuality.



4. A NEW MUTUAL INSURANCE SOCIETY AGAINST THE ACCIDENTS OF AGRICULTURE.

Pending the law on the compulsory insurance of peasants a mutual society for insurance against the accidents of agriculture (1) has recently been formed at Rome under the name of "Terra Italica". The initiative was due to the syndicate for the insurance of woodcutters and the society has gained the adherence of most of the members of that syndicate and of many farms in the various districts of Italy.



5. ITALIAN SAVINGS ON 30 JUNE 1916.

We take the following data from the *Esposizione finanziaria fatta alla Camera dei Deputati nella Seduta del 14 Dicembre 1916*, the report made by

(1) For the other mutual funds for insurance against the accidents of agriculture active in Italy see *International Review of Agricultural Economics*, January 1917, pp. 43-55.

the Minister of the Treasury, Signor Paolo Carcano, on the situation with regard to savings deposits on current account and in interest-bearing bonds on 30 June 1916:

*Savings Deposits on Current Account and in Interest-bearing Bonds
on 30 June 1916.*

Issuing Institutions:

Deposits on current account bearing interest 504,660,392 liras

Institutions of Ordinary Credit:

Number of existing institutions	121	
Subscribed capital	566,381,030	»
Paid-up capital	<u>548,872,935</u>	»

Deposits:

Ordinary and in interest-bearing bonds	553,549,677	»
Savings	<u>354,204,069</u>	»
	<u>907,753,746</u>	»

Popular Banks:

Number of existing banks.	323	
Subscribed capital	81,284,410	»
Paid-up capital	<u>80,526,175</u>	»

Deposits:

Ordinary and in interest-bearing bonds	230,309,310	»
Savings	<u>477,632,799</u>	»
	<u>707,942,109</u>	»

Other Co-operative Banks:

Number of existing banks.	311	
Subscribed capital	43,292,269	»
Paid-up capital	<u>42,749,718</u>	»

Deposits:

Ordinary and in interest-bearing bonds	172,991,152	»
Savings	<u>358,699,802</u>	»
	<u>531,690,954</u>	»

Ordinary Savings Banks:

Savings deposits:

Credit of depositors	2,678,088,923	liras
Deposits on current account and in interest-bearing bonds:		
Credit of depositors and amount of bonds in circulation	226,971,583	»
	<u>2,905,060,506</u>	»

Savings Banks and Postal Banks:

Number of books	6,382,949	»
Credit of depositors	<u>1,987,639,997</u>	»

Monti di Pietà (Pawning institutions):

Ordinary deposits and interest-bearing bonds	120,285,037	»
Savings deposits	<u>125,081,842</u>	»
	<u>245,366,879</u>	»

Rural Funds ;

Various trust deposits	<u>112,335,769</u>	»
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SUMMARY.

Ordinary Deposits	1,808,767,151	liras
Savings Deposits	5,981,347,432	»
Deposits in Rural Funds	<u>112,335,769</u>	»
Total	<u>7,902,450,352</u>	»

Thus Italian savings amounted altogether on 30 June 1916 to 7,902,450,352 liras, as against 6,490,690,179 liras on 30 June 1910. The greater part of the amount — about five thousand millions — entered, as appears from the table we have just given, the ordinary and postal savings banks. The total sum of the deposits in the popular banks, the rural funds and the other co-operative banks — 1,351,968,832 liras — was also notable and shows what confidence these institutions inspire.

RUSSIA.

FINNISH SOCIETIES FOR INSURANCE AGAINST MORTALITY AMONG LIVE STOCK IN 1913. — Bidrag till Finlands officiella statistik : Försäkringsinspektörens berättelse angående de lokala brandstods-och kreatursförsäkringsföreningarnas verksamhet under år 1913 (*Official Statistics of Finland : Report on the Condition of Bailiwick and Parish Societies for Insurance against Fire and Mortality among Live Stock in 1913*) Helsingfors, 1915

At the end of 1913, 121 societies for insurance against mortality among live stock were active within spheres of less area than a government.

They were distributed in the various governments as follows :

Government of Nyland.	5
" " Abo and Björneborg.	7
" " Tavastehus.	3
" " Viborg.	25
" " Saint Michael.	5
" " Kuopio.	5
" " Vasa.	59
" " Uleaborg.	12
Total	121

The number and value of the insured animals were at the end of 1913 as follows :

Horses.	34,162	valued at	12,026,073	marks (1)
Horned cattle.	40,260	" "	4,497,972	"
Small live stock.	—	" "	23,673	"
Total			16,547,718	"

If to these figures be added those relevant to the four societies which are active throughout the country, we find that animals were insured against mortality as follows at the end of 1913 :

Horses.	62,423	valued at	23,344,011	marks
Horned cattle.	57,845	" "	7,115,797	"
Small live stock.	—	" "	23,673	"
Total.			30,483,481	"

Of the total number of horses 20.2 per cent. were insured, of that of horned cattle only 4.9 per cent.

Of the local societies thirty-three insured only horses and four only horned cattle, the remaining eighty-four insuring both horses and horned cattle.

From the point of view of the importance of the risks covered these societies can be grouped as follows, the figures having reference to the number of societies :

(1) 1 Finnish mark = $9\frac{3}{8}$ d at par.

Year	Societies insuring less than 50,000 marks		Societies insuring from 50,000 to 100,000 marks		Societies insuring from 100,000 to 200,000 marks		Societies insuring from 200,000 to 500,000 marks		Societies insuring 500,000 marks or more	
	Num-ber	Per-centage	Num-ber	Per-centage	Num-ber	Per-centage	Num-ber	Per-centage	Num-ber	Per-centage
1905 . . .	10	17.9	13	23.2	19	33.9	11	19.6	3	5.4
1906 . . .	18	23.7	17	22.4	27	35.5	12	15.8	2	2.6
1907 . . .	14	17.5	19	23.8	32	40.0	13	16.2	2	2.5
1908 . . .	16	18.8	17	20.0	31	36.5	19	22.4	2	2.3
1909 . . .	16	17.5	17	18.7	35	38.5	20	22.0	3	3.3
1910 . . .	22	22.0	22	22.0	30	30.0	23	23.0	3	3.0
1911 . . .	22	21.0	25	23.8	35	33.3	20	19.0	3	2.9
1912 . . .	25	22.5	27	24.3	37	35.4	19	17.1	3	2.7
1913 . . .	27	22.3	33	27.3	38	31.4	20	16.5	3	2.5

The percentage of accidents was 1.94 in the case of the insured horses, 1.33 in that of the insured horned cattle. Indemnities amounted to 1.26 per cent. of the insured value in the case of horses, 1 per cent. in that of the horned cattle.

The average indemnity paid was 225.49 marks for a horse, 80.65 marks for a head of horned cattle.

The following table resumes the data on this head for the ten years for which there is authentic statistical material:

Year	Number of Accidents		Indemnity per 100 marks of insured capital		Indemnity per Accident	
	Horses Percentage	Cattle Percentage	Horses Marks	Cattle Marks	Horses Marks	Cattle Marks
1904	1.67	1.68	1.10	1.00	230.03	55.43
1905	1.77	1.94	0.96	1.08	212.53	52.68
1906	1.60	1.86	1.11	1.18	229.73	55.96
1907	1.63	1.45	0.97	1.00	195.64	62.25
1908	1.65	1.19	1.11	0.87	224.69	68.21
1909	1.74	1.46	1.16	1.00	226.70	65.20
1910	2.03	1.26	1.20	0.93	204.80	71.30
1911	2.31	1.25	1.68	0.97	299.22	76.56
1912	2.21	1.52	1.37	1.06	214.05	71.08
1913	1.94	1.33	1.26	1.00	225.49	80.65

The premiums paid in 1913 were as follows :

For the insurance of horses	especially.	112,014	marks
» » » » horned cattle	» .	28,241	»
» reserve fund		7,224	»
and generally.		95,852	»
Total . . .		243,331	»

This sum constitutes 1.53 per cent. of the average amount of the insured capital during the year. Other receipts and interest etc. brought the societies 19,970 marks or 0.13 per cent. of such average amount. The receipts were thus altogether 263,301 marks or 1.66 per cent. of the average amount of the insured capital. Of this sum the following sums were spent :

On indemnities	188,612	marks	or	1.19	per cent.	of the insured capital
On costs of administration	27,693	»	»	0.17	»	»
On increasing reserve fund . .	10,778	»	»	0.07	»	»
On other expenses . . .	13,184	»	»	0.08	»	»
Total . . .	240,267	»	»	1.51	»	»

There was thus a net profit of 23,040 marks.

Costs of administration reached 11.4 per cent. and other expenditure — costs of organization, interest, etc. — 5.4 per cent. of the premiums received.

The balance-sheets of the societies showed at the end of the year, when the amount of engagements had been deducted, an excess on the receipts side amounting to 90,984 marks or 5.50 marks for every 1000 marks of insured capital.

Part III: Credit

ALGERIA.

CREDIT FOR COLONIZATION IN ALGERIA.

SOURCE:

AVENOL (J.): Les Banques Algériennes et la Banque de l'Algérie (*Algerian Banks and the Bank of Algeria*) in *Revue des Sciences politiques*, 3rd. Series, 31st. year, Vol. XXXVI. — III. Paris, 15 December 1916.

The considerable economic development of Algeria in the last ten years is proof of the remarkable effort which colonists have made in the domain of agriculture, and also of the perfect appropriateness of the financial methods which have been employed to support agriculture by providing it with necessary credit.

From 1901 to 1911 Algeria's foreign trade doubled, being represented in 1913 by the sum of fifteen hundred million francs (1).

The success of this effort was only rendered possible by the support given to colonists by the bank. The three principal of them are the *Banque de l'Algérie*, which has a privileged issue, and two private houses — the *Crédit Foncier d'Algérie* and the *Compagnie Algérienne*.

M. J. Avenol, from whom we borrow the chief data contained in this short study, remarks that the two generations following on the conquest did not experience hindrance and uncertainty in vain. Algeria has become a country of bold, enterprising colonists, having faith in the future of the land and the technique and traditions necessary to deriving profit from its

(1) 1 franc = 9³/₈ d. at par.

soil. The colonists are however short of capital : they need credit and therefore the collaboration of the banks. The banks have, like the settlers, profited by the lessons of an experimental half century and have also taken on a distinctly Algerian character. In the midst of their business difficulties they have worked out their methods and become aware of the part they have to play. As years pass their functions become more and more important. Agricultural wealth grows with increasing rapidity and receives from credit increasingly powerful aid.

We have said that the foreign trade of Algeria has doubled in ten years. The value of the paper held by the three chief banks has been multiplied by five in the same period and this fact is the measure of the part the banks have taken in colonization — a part which has been preponderant.

§ I. THE CHARACTER OF THE CREDIT AFFORDED TO COLONIZATION.

The problem of credit in Algeria is posed as follows : .

" It is easy for colonists to procure land, but only uncultivated, bush-grown land, or — what is worse — land overgrown with deep-rooted lentisks and palm-trees. To bring it under cultivation, erect buildings, buy machines and build up stock — all this asks for more than hard work and courage. And when a well worked farm has arisen out of the Arabian *bled*, circulating funds are still needed, to cover the costs of the seeds, the maintenance and the harvest which allow the annual course of agricultural labour. Must the colonist from the outset have all the capital which he has to invest? Will he be able to contract for a long-term loan, like a French landowner who wishes to improve his property? "

Land credit as understood in France did not seem to be adapted to a new country like Algeria. What after all is a mortgage of bush-land worth? A borrower has, as in all countries where the value of the soil has not been realized, no assets but his chances and his hope. It has been deemed imprudent therefore to trust him with capital of which he would be master for a long period.

Moreover he cannot make his farm in a single year but brings his efforts to success gradually. It is enough to grant him every season advances proportionate to the harvests which invested capital may be expected to produce. The risks of loss are thus diminished, and progressive efforts can be helped by successive advances for short terms. Thus the creditor follows the fortunes of the debtor step by step. Each period brings him a reward. Each year his security is strengthened by the increased value of the property, and his mortgage, if he have one, has eventually a firm basis.

This transaction may be compared with that which enables a trader to open a credit account : there is no single grant of one loan but a series of successive operations. But they are timed more slowly than in the trader's case in accordance with the seasons — advances being granted when the season opens and repaid at harvest-time.

These short loans are banking business and form indeed the chief business of the Algerian banks, which are above all agricultural banks. Their paper certainly includes many ordinary commercial bills which represent realized transactions and settlements of debts. But it consists largely of these loan titles which are in the traditional form of bills maturing in three months, there being a tacit agreement that they are twice renewable in order to bring them into line with the farming cycle.

It is seen that personal credit is here concerned. Naturally the banks, each in its own way, seek to surround their debtors with a network of securities; but these, excellent though they be, are only accessory, as appears from what we have already said. The chief dependence is on a just estimate of any colonist admitted to the benefits of credit.

The paper of the Algerian banks represents therefore in part short-term loans, certainly recoverable with good management, but not maturing as rigorously as ordinary banking notes because their realization depends on the sale of the harvest.

§ 2. THE SOURCES OF THE CAPITAL, ASSIGNED TO AGRICULTURAL CREDIT.

Obviously the banks cannot find all the capital required by their business in Algeria, but must supply themselves abroad, that is to say in France. In what form do they acquire this capital — as capital, shares, deposits at sight or financial bills — and in what proportion? The very special character of their business does not leave their choice entirely free.

They cannot count on that uninterrupted series of graduated receipts which gives the desired liquidity to the paper of French banks.

Many of their advances are tied up for from eight to nine months in a year. From the beginning of the agricultural year the number so immobilized increases until the harvest releases all of them together. A new financial effort is then necessary. Harvest-time, the single period in which revenue is received, opens up a series of numerous settlements — purchases of harvested products, payment of wages, payments for transport and various acquisitions, repayments. This accumulation of payments within so short a time gives rise to a considerable need of money. The banks must meet it, for the purchasers of the harvest, with whom the movement starts, come to them for circulating funds in the form of seasonal credit.

This progressive and uniformly periodic nature of obligations cannot accommodate itself to resources which are too fluid and unstable: banks subject to such obligations cannot run the risk of being suddenly forced to make large repayments. Therefore they must follow the example of business banks and diminish their margin of liabilities by working with a large capital in shares. But where can they find complementary resources in a country poor in capital? On what reservoir can they draw in order to feed the stream of their business? Is it possible that an agricultural country, which has financial resources insufficient for its own needs, can escape from strict subjection to the European banks, by avoiding the

too direct effects of the reaction from international situations and tight money-markets, and by acquiring, if not independence, at least a certain financial autonomy? Algeria seems to be in the privileged position which allows of all this. Its two great private banks, the *Crédit Foncier d'Algérie* and the *Compagnie Algérienne*, have in France not only the headquarters of their respective companies but also agencies. They act as French banks and have succeeded in obtaining depositing clients. This direct participation in the resources of the short-term capital market is a great force: it enables them to divide their debt among numerous depositors, almost all of whom are without the preoccupations of professional finance and have markedly regular habits and needs.

These banks are thus directly connected with French capitalists and the constant level of their resources is the better assured to them. But these deposits, although they are abundant and relatively stable, have not the needed elasticity. In order to have resources at command during the eight or ten months of the progressive immobilization of their advances the banks must be able to rediscount their paper. For this they have locally the support of a bank which helps them to undertake new operations before those in course have been completely realized. The *Banque de l'Algérie*, being master of its issues, allows rediscount, and thus gives to the other banking houses the opportunity of making settlements on the volume of their business, and provides them with the resources in credit and specie which are required by the needs of the harvest.

§ 3. THE ROLE OF THE BANQUE DE L'ALGÉRIE.

The *Banque de l'Algérie* has been privileged for sixty-five years to issue notes; and its activity and prosperity have increased considerably, especially in the last fifteen years. Its powers are large, and its methods are based rather on unhampered experience than on rules. No cover is compulsory for its issues; it discounts bills and gives notes in exchange for them. Its circulation therefore varies with the necessities of the moment, is enlarged when the need of money is considerable and narrowed in times of stagnation. It is of course limited by a legal maximum. The bank accepts for discount bills bearing two signatures, and if it undertakes rediscount it seeks especially for a direct clientele. It is easy to understand that in order to associate itself with the activity of the country the bank must not in these circumstances merely accept commercial bills, but must be above all an agricultural bank and make advances.

If it be profitable to a new country that its fiduciary circulation should be important among its necessary means of credit, the ability of a bank issuing notes to over-develop its business constitutes on the other hand a grave danger. It is therefore above all necessary to exclude credit granted for motives of complaisance and to allow credit to have a bearing only on genuine business. At the price of continued experience the *Banque de l'Algérie* has acquired an extremely sure technique. This fiduciary circula-

tion, linked without rigidity to the course of its business, therefore provides it with a precious instrument. Since gold does not circulate in the colony, owing to the fact that the balance of trade with the mother-country is against it and to native hoarding, the currency is exclusively Algerian. The notes are payable to the bearer at sight in silver.

None the less there is exchange between Algeria and France, the perfect equilibrium between the two monetary systems being due to a curious mechanism created by an administrative convention. The *Banque de l'Algérie* has opened at the Treasury a current account into which agents make payments and whence they make withdrawals. Owing to the costs of military occupation public expenditure in Algeria has always exceeded local resources. The Treasury would therefore have had frequently to reinforce the credit it granted, had not this been accomplished automatically and simply by a utilization of sums placed at the Treasury's disposal by Algerians for the payment of their foreign debts. The concentration of these in the *Banque de l'Algérie* compelled this bank to become the intermediary for payments in France, charging a moderate commission. In virtue of this convention the bank must remit a bill on the home Treasury, on demand, to anyone paying its amount, and such bill is covered by the bank's credit account. As for Algerian debtors they receive for their own bank notes a value which can be realized in France at par. In recent years this system of direct remittances has been largely replaced by postal orders which accrue to the Treasury's account by the medium of post-office receivers. Postal administration does no more than see that its receipts are paid into the Treasury's current account at the *Banque de l'Algérie*, and the latter is responsible for settling Algerian debts to the home country.

From 1904 to 1913 the issues of the post-office exceeded the amount of the payments in the form of postal orders by fifteen hundred million francs, for which sum the bank became the Treasury's debtor. This debt did not accumulate for the credit balance of the Treasury remained constantly below a hundred million francs except in the crisis of 1912-1913.

How was the bank able to free itself from the burden? In the first place the Treasury was obliged to ensure an average annual payment of one hundred millions from the home budget, which represented in the period under consideration relief to the extent of one thousand millions.

For the other five hundred millions the bank was obliged, failing credit in France, to utilize its debt in Algeria. This sum did not therefore leave the colony but represents the new capital applied to its development. This new capital has been transferred from France to Algeria by a stroke of the pen, and has been obtained by drawing on the bank which is France's chief debtor and which converts home funds into its notes.

Thus the criterion according to which the *Banque de l'Algérie* regulates the Algerian money market is perceived, the principle namely of avoiding above all else the disproportionate growth of its debt to the Treasury.

The Algerian banks are definitely neither agencies for managing deposits nor agencies for discounting paper. They depend on colonization and the amount of their business is proportionate to its progress. It is the

new colonists who increase their clientele and therefore they favour them, in fact finance them. Credit is very easily obtained in this colony. The necessary means are supplied by the original mechanism to which we have alluded and which M. Avenol succinctly and very accurately describes as follows :

" Three large banks operate in Algeria. Two of them there employ capital obtained either locally or in France. These resources of their own give them a precious autonomy, but the course of their business is slow. Do they not perhaps limit their credit business too rigidly ?

" It is the part of the *Banque de l'Algérie* to give elasticity to the system. An issuing bank having a small capital, it finds resources in its notes payable to bearer : subject to no obligation as regards cover, it makes a currency of the credit it affords. It has a direct clientele with whom its operations are very important. But it also rediscounts the paper of banks. Its fiduciary circulation constitutes the principal money of Algeria, and — varying with the amount of business done — is always complementary to the capital of the banks. Thus Algeria makes advances to itself.

" Unfortunately this circulation has no international value, not because it is itself vicious but because Algeria is always in the position of a debtor to the mother-country.

" Thanks however to a curious mechanism connecting French creditors and Algerian debtors payments are made in francs at par, as though France and Algeria were one country. By an administrative device the bank is the only debtor, the Treasury the only creditor. This disadvantageous position is exactly that which gives the bank an interest in playing that moderating role which is suited to an issuing bank. It is the course of its indebtedness to the Treasury which gives it the data whence to determine the rate of discount, and the course of discount makes the supply of capital in Algeria proportionate to sound business ".

This necessity of maintaining the current account with the Treasury at a just level was made particularly clear by the crisis of 1912-1913. This crisis was an indirect result of the very abundant corn harvest and vintage of 1910. The resources consequently available certainly gave a new impulse to land purchase and the bringing of land under cultivation, but they led more particularly to expenditure on luxuries — the value of imports increasing by 150 million francs in three years — and to speculation. Unfortunately in 1912 Algerian business ceased to develop smoothly and lost equilibrium. The paper of the *Banque de l'Algérie* was increased to excess by rediscounting operations with other banks which found their resources largely absorbed by the need for credit. At the same time the debit balance of the *Banque de l'Algérie* with the Treasury rose inordinately, because the product of discounted bills was largely sent to France while the bills given by the bank returned to it by the medium of the post-office. By opportunely raising its decreed rate of discount the *Banque de l'Algérie* put a stop to this flow of business, and the two great private banks decided to increase their capital and were thus able to re-establish equilibrium.

CANADA

SCHEME FOR THE ORGANIZATION OF RURAL MORTGAGE CREDIT IN MANITOBA, SASKATCHEWAN AND ALBERTA.

SOURCE:

THE GRAIN GROWERS' GUIDE, Winnipeg, 22 November 1916.

Mr. Edward Brown, provincial treasurer of Manitoba, has together with the provincial treasurers of Saskatchewan and Alberta drawn up an interesting scheme for the uniform organization of rural mortgage credit in these three provinces. It seems that the scheme will shortly become law.

It does not exactly reproduce any of the various systems of mortgage loans followed in the different countries of the world, but has been inspired by one and another of them, adopting their provisions and modifying them, where necessary, to meet the needs of West Canada. It has therefore its own individuality although it is based on the well-known principle of amortization.

The governments of the three provinces cited propose to form in each of them a special organization to be known in Manitoba as the "Manitoba Rural Credit's Association" and to have its headquarters in Winnipeg. This association will have the duty of applying the system of mortgage credit and will be under a board of management consisting of five members. The chairman or commissioner will be the only permanent official and will be appointed by the government. Two members of the board will be nominated by the Union of Municipalities and the other two by the government. Two of the members of the board will be Conservatives and two of them Liberals.

It will be provided in the legislation that money will be lent by the Rural Credit's Association on first mortgages on occupied farms, only for the following purposes: —

- 1) To provide for the purchase of land for agricultural uses.
- 2) To provide for the purchase of the equipment, fertilizers and live stock necessary to the proper and reasonable working of a mortgaged farm.

3) To provide buildings and enable improvements on the land — the term "improvements" to be defined by the board.

4) To liquidate the existing debts of the owner of the mortgaged land, or debts he subsequently incurs for the purposes which have been cited, the board at all times first approving such expenditure.

Some especial provisions of the scheme will now be given.

The smallest loan that will be granted is one of \$500, the largest one of \$10,000. None will exceed 50 per cent. of the value of the land as appraised for agricultural purposes, its earning power being principally considered in appraising. No persons except farmers, actually engaged in farming or about to engage in it, will be able to secure loans. No borrower will be allowed to sell or transfer his share in the association, which will remain permanently attached as part of the mortgage transaction. If he sell his farm the board has power to transfer the mortgage and also the shares to the purchaser. If he die the mortgage and shares may go to his heirs. Every applicant for a loan will use a regular prescribed form on which will be stated the objects for which the loan is to be used. Penalties will be provided for wilful mis-statements. If any borrower spend any part of his loan for purposes other than those specified in his application, or violate his mortgage contract in any way, the board will have power to declare his mortgage due and payable at once. All payments on the mortgages will be made on 1 December, thus falling due together and so reducing the work of administering the scheme. The date is chosen as being that most convenient to farmers. It is the plan to charge 8 per cent. interest on all overdue payments. All mortgaged buildings are to be insured to the board's satisfaction.

Loans will be made only for terms of twenty, thirty or forty years, the principal and interest to be repaid in annual instalments adjusted according to the term. Thus a \$1,000 mortgage for twenty years will entail a repayment of \$87.22 a year, for principal and interest, and this will discharge the entire obligation in the twenty years. On a thirty year mortgage of \$1,000 the annual payment due will be \$71.02; on a forty year mortgage of \$1,000 it will be 63.27.

The following table shows the annual payments due for a thirty year mortgage.

Yearly Payments for a Thirty Year Mortgage under the Proposed Scheme (1).

Year	Principal Balance	Interest 5 %	Principal Repayment	Reserve 0.79 %	Total Payments
1	\$ 1,000.00	\$ 50.00	\$ 13.12	\$ 7.90	71.02
2	986.88	49.34	13.88	7.80	71.02
3	973.00	48.65	14.69	7.68	71.02
4	958.31	47.92	15.53	7.57	71.02
5	942.76	47.14	16.43	7.45	71.02
6	926.35	46.32	17.38	7.32	71.02
7	908.97	45.45	18.39	7.18	71.02
8	890.58	44.53	19.46	7.03	71.02
9	871.12	43.56	20.58	6.88	71.02
10	850.54	42.53	21.77	6.72	71.02
11	828.77	41.44	23.03	6.55	71.02
12	805.74	40.28	24.37	6.37	71.02
13	781.37	39.07	25.78	6.17	71.02
14	755.59	37.78	27.27	5.97	71.02
15	728.32	36.42	28.85	5.75	71.02
16	699.47	34.97	30.52	5.53	71.02
17	668.95	33.45	32.29	5.28	71.02
18	636.66	31.83	34.16	5.03	71.02
19	602.50	30.13	36.13	4.76	71.02
20	566.37	28.32	38.23	4.47	71.02
21	528.14	26.41	40.44	4.17	71.02
22	487.70	24.39	42.78	3.85	71.02
23	444.92	22.25	45.26	3.51	71.02
24	399.66	19.98	47.88	3.16	71.02
25	351.78	17.59	50.65	2.78	71.02
26	301.13	15.06	53.58	2.38	71.02
27	247.55	12.38	56.68	1.96	71.02
28	190.87	9.54	59.77	1.71	71.02
29	131.10	6.56	63.42	1.04	71.02
30	67.68	3.38	67.11	53	71.02
		\$ 976.67	\$ 999.43	\$ 154.50	\$ 2,130.60

Ordinarily it would be expected that the farmers in Western Canada would not care to assume mortgages running from twenty to forty years, but the new scheme allows any farmer to pay off his mortgage in full at any half-yearly period. He will thus benefit by the low rate of interest and the small payments and yet have the opportunity of discharging his mortgage whenever he is in a position to do so.

After the necessary provincial legislation has been enacted no money will be lent to any farmer until the municipality in which he resides has sub-

(1) In making the calculations in even dollars and cents a small difference (57 cents) occurs which would be absorbed in actual practice.

mitted a by-law to the electors and their majority has voted in favour of it. The Act will then be brought into operation in this municipality. A municipality by its approval of the by-law will guarantee the government against loss on mortgages placed within it to the extent of 5 per cent. of the money lent. This measure is intended to improve the security of the bonds which will be issued, and it is not expected that there will be any losses.

When the by-law has been approved the municipal council will appoint a committee, either of its own members or others, to inspect farmers' applications for loans and, at their discretion, to recommend them to the board.

The secretary-treasurer of the municipality will receive all applications for loans as part of his regular duties and without extra payment from the government, but there is nothing to prevent the municipality from arranging extra payment for him for this work.

The proposal of the government is to raise the necessary money by offering 5 per cent. bonds, on which both principal and interest will be guaranteed by the government, for sale throughout the province and in the money markets of the world. It is expected that they will sell at par at the present time and that the necessary money will therefore cost the government about 5 per cent. The expense of administering the Act is expected to be not quite 1 per cent., so that the total average cost of mortgages will be less than 6 per cent. on thirty year loans.

The government intends the Rural Credits Association never to be commercialized. In future years all its capital stock and shares are to be held by the government, or farmers who have borrowed from it on mortgages, and who will have received 5 per cent. of their loans in shares.

The shares are expected to pay a fairly good dividend, depending entirely on the profits of the association. No dividends will be paid until a reserve account, equal to 20 per cent. of the paid-up capital, has been created.

The profit in the conduct of the association is expected to come through the cheapness of administration, and the margin which is provided by the fact that the rate of interest on repayments is lower than that on the original loan.

To set the scheme in operation in Manitoba the government will arrange to borrow from the banks at 5 per cent. the sum of \$1,000,000 dollars, and to subscribe for \$100,000 stock in the association. When the \$1,000,000 has been lent on mortgages 5 per cent. of this sum, or \$50,000, will have been subscribed in stock by borrowers. The government will then issue guaranteed 5 per cent. bonds, free from all local taxation, to the maximum extent of \$9,000,000.

To keep down the cost of administration the government will provide that the Land Titles Office make no charge for investigating titles and registering mortgages, placed by the Rural Credit's Association, beyond the regular registration fees. The government in Manitoba will also provide

that the accounting work in connection with the mortgages be done in the office of the comptroller general, without charge to the association.

The rate at which farm mortgages will be secured will involve a saving of from 1 to 2 $\frac{1}{2}$ per cent. in Manitoba and from 2 to 4 per cent. in Saskatchewan and Alberta.

The scheme may have become actual next spring. If it prove satisfactory the governments of the provinces concerned are expected, in the course of a year or two, to tackle the question of what is commonly known as "floating credit for farmers", the loans which carry them over from seed-time to harvest. These now cost from 8 to 12 per cent. and it is hoped that it will be possible to supply them more cheaply.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE FRANCO-ARGENTINE MORTGAGE BANK IN 1915-1916. — *L'information*, Paris,
27 Décembre 1916.

The results obtained in 1915-1916 have again been injuriously influenced by the stagnation of business, which has continued in the Argentine, contrary to the hopes raised by an excellent corn harvest and by the great need in Europe for the country's products.

The profits which the farmers hoped to reap from abundant harvests and the high selling prices in purchasing countries were sensibly reduced by the great difficulty of finding ships for transport and the consequent enormous rise in freights, which in many cases, and notably in those of corn and maize, came to surpass the value of the merchandize in the producing country. Hence in the Argentine the price of cereals sank to a level which left hardly any profit to agriculture; exportation was arrested; and landowners were in consequence much embarrassed.

The mortgage banks naturally felt the reaction from this economic situation; and the Franco-Argentine Bank found, in spite of its caution in granting loans and its vigilance in exacting due annual payments, that the arrears of interest owing to it amounted on 30 June 1916 to 11,836,777.90 francs.

In consequence however of the slowing down of business, of the reduction of the habitual expenditure of the republic in foreign countries, and the reduction of imports, the unemployed capital in the banks is very plentiful and can be obtained on easy terms. Therefore, in spite of the straits of landowners, mortgage banks have been obliged to lower the rate of interest on their loans. But, since the cereal harvest in North America and Europe was defective, prices have risen in the Argentine, and for some time an improvement in the economic situation has been perceptible.

Bonds. — The bonds, redeemed bonds being deducted, amounted on 30 June 1916 to

187,433	at 4	per cent.
242,458	at 4.50	per cent.
49,511	at 5	per cent.

that is a total of 479,402 bonds

representing a nominal capital of 238,701,000 francs.

Mortgage Loans. — On 30 June 1915 the amount of mortgage loans reached 247,751,622 francs.

During the year 1915-1916 the society examined 101 applications for loans, for a total amount of 41,165,000 francs. Fifty of them, representing 13,137,000 francs, were rejected, and the society therefore granted only fifty-one new loans for a total amount of 28,028,000 francs, of which sum 26,848,000 francs have already been paid.

On the other hand the society recovered during the year 39,843,072 francs, by repayments of mature loans, anticipation of repayments and expropriations. The amount of current mortgage loans diminished by 12,995,072 francs, their total sum being 234,756,550 francs on 30 June 1916.

This sum was made up as follows :

Urban loans	16,290,950	francs
Rural " 	218,465,600	"
	234,756,550	"

The rural loans thus represent 93.06 per cent. of the total amount of current loans.

Payment of Annuities. — The amount of the annuities falling due on 30 June 1915 and not paid on that date was 10,377,879.20 francs. The half-yearly payments which fell due during the year amounted to 20,299,133.70 francs. The total sum of yearly payments to be received between 1 July 1915 and 30 June 1916 was therefore 30,677,012.90 francs. Of this sum 18,840,235 francs was recovered, so that on 30 June 1916 the amount of due and unpaid annual payments was 11,836,777.90 francs. Most of the debtors show excellent dispositions ; but the situation in which the last few years has placed them makes it difficult for such of them as were not at first able to meet their engagements to free themselves now. It is therefore returns arising out of earlier years which are most easily collected.

FRENCH COLONIES.

THE DISCOUNT AND LOAN TRANSACTIONS OF COLONIAL BANKS. — *Ordinary session of Chamber of Deputies, meeting of 18 December 1916 Appendix no. 2793. Report in the name of the Commission for Foreign Affairs, the Protectorates and the Colonies, charged to examine a proposed law for the prorogation of the privilege of colonial banks and of their by-laws.*

The discount and loan transactions of the colonial banks have not at any moment been interrupted ; and in spite of the state of war the figure representing these, by far the most interesting of banking transactions from the point of view of economic activity, shows a very noticeable advance on similar figures for previous years.

Martinique. — Thus the Bank of Martinique did not hesitate to give an exceptional importance to its loans on harvests which rose to the sum of 4,528,000 francs (1) as against 3,595,000 francs in 1913-1914 ; that is they increased by nearly a million. In the same way the loans on merchandise passed from 676,000 francs, their sum in 1913-1914, to 1,169,000 francs in 1914-1915 and 1,764,000 francs in 1915-1916 ; that is the transactions of this one kind increased in value by 1,100,000 francs in two years.

The total amount of the loan and discount transactions of the Bank of Martinique, including the negotiation of bills in foreign countries, rose from 23,164,000 francs in 1913-1914 to 34,485,000 francs in 1914-1915 and 37,124,000 francs in 1915-1916 ; that is the increase in two years was one of fourteen millions or 66 per cent.

Guadeloupe. — The same considerations and statements are applicable to the Bank of Guadeloupe, the advances of which have been in a very large proportion, as in Martinique, in the form of loans on harvests. This bank in 1914-1915 made such advances to the amount of 4,176,400 francs as against 3,576,000 francs in 1913-1914.

It is to be noted that the loans on harvests, although they involve such large risks, have been made at a rate no higher than loans by the Bank of France on first-class French securities, namely 6 per cent. In other words the Bank of Guadeloupe, which might most legitimately have raised this very low rate, has subordinated all considerations of private interest to care for the public interest.

As in Martinique loans on merchandise have been notably developed during the war. Their total rose from 114,530 francs in 1913-1914 to 420,500 francs in 1914-1915 and 805,950 francs in 1915-1916.

The total sum of the discount and loan transactions of the Bank of Guadeloupe, including the negotiation of bills in foreign countries, was 27,879,670 francs in 1914-1915 and 31,510,440 francs in 1915-1916 as against 22,767,800 francs in 1913-1914.

(1) 1 franc = 9 $\frac{3}{8}$ d at par.

Reunion. — The Bank of Reunion has evinced since the very beginning of the war a remarkable spirit of initiative, taking steps without waiting for any sort of impulsion, whatever might be the gravity of the risks involved.

In the first place this bank notified the governor of the colony as early as 1 August 1914, that is before war had been declared, that it would meet any needs which might arise if the colony should be isolated by the interruption of communications with Paris. This undertaking had reference not only to the needs of manufacturers, planters and cultivators of every description, but also to those of the colony, even if it should come to be deprived of an important part of its receipts by the anticipated reduction in the revenue from customs dues and tolls. The bank offered these services to the colony spontaneously and thus gave proof of its desire not to allow the general interest to suffer.

Subsequently, when it had advertised in all the newspapers of the colony that it would continue to work as in the past, it decided to grant advances on merchandise at the rate of 6 per cent. — a rate less by 1 per cent. than that on which the Bank of France then made advances on the best security — to all large and small planters, manufacturers and business men of every description. This rate, low as it was in the existing circumstances, has been yet further reduced since November 1915 to 5 per cent. for loans on merchandise for export and on most imported wares, notably rice, that is on almost all merchandise.

The bank has done even better in the matter of loans on harvests, which are one of the most risky of banking transactions and are effected only by the banks of the old colonies. In their case it has maintained the 5 per cent. rate which is so favourable to local agriculture, and is less by 1 per cent. than that now charged by the Bank of France on the safest transactions.

Further, since it reasonably anticipated from the time of the outbreak of hostilities a very considerable rise in the price of sugar, the principal article of export, it recommended all producers, whether large or small, not to sell at the prices current when the war began. It advised small producers to form themselves into groups in order to receive the loan which it would grant them on pledged goods, and to incur responsibility in the name of one of their number, thus avoiding the payment of registration and stamping dues (three francs a deed). Finally, since the bank believed that the exploitation of persons of small means by speculators must be avoided at all costs, it refused to make certain advances on pledges which would have had a purely speculative character; and shortly afterwards organized at its own cost a service of information by cable, thus apprising the population of the prices which the different colonial products were fetching in Paris.

The loans which the bank granted on the products of the colony in these conditions rose from 5,915,000 francs in 1913-1914 to 10,072,600 francs in 1914-1915, that is to say they were doubled. Between 1913-1914 and 1915-1916 the loans on imported merchandise rose from 3,555,000

francs to 6,268,000 francs ; and the total sum of loans on merchandise, both imported and exported, from 9,471,000 francs to 15,502,000 francs.

As regards the total sum of loan and discount transactions, including the negotiation of bills on foreign countries, it passed from 21,082,290 francs in 1913-1914 to 39,795,400 francs in 1915-1916.

French Guiana. — In Guiana the privileged bank which, owing to the special economic situation of the colony, transacts business differently from the other colonial banks, has also very definitely faced existing circumstances only from the point of view of the public interest, a fact which is sufficiently proved by the annual report drawn up by the governor of the colony on the general situation of Guiana, and reproduced in the *Journal Officiel* of the republic of 15 October 1915. We will quote from this document only the following short extract :

“ The bank then decided to make advances to the producers on their products of which there had thus come to be a slump, and to enable them to continue work by ensuring the wages of the workpeople.

“ It should be realized that the bank made these advances on raw products at the discount rate of 6 per cent. a year, which for the four months which were the average term of the transactions, yielded a profit of 2 per cent.

“ This rate should be considered very low for Guiana, where money costs as much as 20 per cent. It would have been moderate even in France where the rate of discount has latterly risen to as much as 9 per cent.

“ It should also be remembered that the goods pledged to the bank had only a conventional value, that no one could foresee when it would be possible to realize the value of these products which were security for the loans.

“ It may be said that in undertaking these transactions, as in taking other opportune steps, the bank has been led above all by a broad interpretation of its duty as a privileged establishment.

“ The bank took the point of view of the colony's highest and most general interest. Far from taking restrictive measures it enlarged the scope of its transactions. It placed no obstacle in the way of the withdrawal of deposited funds ; it provided the resources necessary for the continuation of industry ; it maintained its low rate of discount and reduced the premium of its *tirages* in spite of the increased cost of exchange transactions ”.

It appears from the reports of the Bank of Guiana that the figure representing its loans on merchandise rose in 1914-1915 to 1,039,000 francs as against 192,700 francs in 1913-1914 ; that is to say that the importance of these transactions was multiplied by six. As regards the total sum of the bank's transactions it reached 9,233,350 francs in 1913-1914, 9,995,310 francs in 1914-1915, and 12,402,830 francs in 1915-1916.

Generally, credit has been granted by the banks of the old colonies since the outbreak of hostilities on terms which are noticeably better than those prevalent in France. Yet rates much higher than those obtaining in Europe have always, notoriously, been considered normal in the colonies.

RUSSIA.

THE QUESTION OF FOREST CREDIT IN FINLAND. — VESTERINEN (Emil): *Kysymys lainan antamisesta metsävakuutta vastaan* (The Question of Credit on the Security of Forest Mortgages), *Maatalous*, Helsingfors, Year 1916, Number 14.

The Union of the Savings Banks of Finland has taken advantage of a law of 1901, which instituted mortgages on wood-felling contracts in the interests of workers in wood, and has approved a detailed scheme for the organization of forest credit and submitted it to the 408 savings banks in the country, inviting them to introduce such credit into their business. Savings banks do indeed seem to be well fitted for activity of the kind, in right of their simple and inexpensive organization, their knowledge of local life, and their opportunities for watching over the mortgaged forests.

The clauses of the scheme may be resumed as follows:

- 1) The owner of a forest causes it to be valued by an expert in forestry, who should ascertain its actual condition, the quantity of its wood which can be sold and the price this wood will actually fetch, the total amount of wood cut annually, and the principles on which the forest should be maintained; and he should draw up a short plan for its management during the first ten years.
- 2) The owner of the forest makes a wood-felling contract, in the name of the savings bank or at its order, and has it registered at the office of the competent court.
- 3) He then remits to the savings bank the registered contract and the valuations, together with his request for a loan and the other documents necessary to a grant of credit secured by a mortgage on land. A deed of pledge is then drawn up according to a form fixed by the savings bank.
- 4) Before the owner of the forest can receive his loan he must remit to the savings bank a policy insuring the forest against fire. The recently formed Union of Mutual Insurance against Fire of the Forest Owners of Finland has inserted in its by-laws a paragraph which contemplates forest credit, and guarantees an indemnity to anyone who has lent money to the owner of a forest in return for his deed of pledge.

Part IV: Agricultural Economy in General

AUSTRIA AND HUNGARY.

AGRARIAN TAXES IN BOSNIA AND HERZEGOVINA.

OFFICIAL SOURCES:

VERWALTUNGSBERICHT FÜR 1906-1911 (*Report of the Administration 1906-1911*).

OTHER SOURCES:

SCHEID (Dr. F.): Bosnien und die Herzegovina unter der Verwaltung Oesterreich-Ungarns (*Bosnia and Herzegovina under the Administration of Austria-Hungary*). Leipzig, 1914.

DEMITZ (L.): Die forstlichen Verhältnisse und Einrichtungen Bosniens und der Herzegovina (*Forestal Conditions and Institutions of Bosnia and Herzegovina*). Vienna, 1905.

§ I. AGRARIAN TAXES IN THE PERIOD OF TURKISH DOMINION.

In the period of Turkish dominion agriculture in Bosnia and Herzegovina was burdened with the following dues:

- 1) the tithe,
- 2) the *Sulus* and *Verghia* taxes,
- 3) the taxes on live stock.
- 4) the military taxes.

We will examine them separately:

1) *The tithe*. — This agrarian tax, called "Pscior" in the language of the country, burdened land strictly proportionately to the quantity of its products. In the beginning it could be considered to be a species of due which the occupiers of the land had to pay to the State, that is to the institution which the Koran declared and recognized to be the sole owner of the soil, it being possible to grant only a usufruct in the soil to private

individuals. The price of such grant, paid to the State in exchange for the enjoyment of a right of usufruct, should, as the Koran conceived it, represent a definite acknowledgement on the part of the occupiers of the State's sovereign right in the soil. This tribute transformed itself gradually into the tithe.

In the first years of the Turkish dominion the tithe did not fall equally on all usufructories, who might be either Mahometans or Serbs converted to the religion of Islam. The right of the former to the usufruct of the land derived from the services they had rendered, themselves or in the person of their ancestors, to the State, as warriors or administrative officials, and they were merely obliged to pay to the Treasury the tenth part of the gross value of the products of the soil. As regards the second class of taxed persons — the Serbs who because they had been converted to Islamism had been able to preserve their position as usufructories of the soil — they were obliged to pay to the State a tax greater than the tenth, representing 20 per cent., 30 per cent. and even 50 per cent. of the gross value of their products. This difference in the value of the tithe — according to whether it were levied from usufructories who were Mussulmans by race or from Serbs converted to the Mussulman religion — tended to be reduced with the passage of time so that at the time of the Austrian and Hungarian occupation it had entirely disappeared; and all the usufructories, without distinction of race or religion, were in fact obliged to pay a tithe corresponding to 12 $\frac{1}{2}$ per cent. of the gross value of the products of the soil.

It should be noted that this tribute did not always go directly to fill the coffers of the State. In the early period of Turkish occupation the tithe was levied by the military authorities whom it placed in a position to meet the expenses incurred for the maintenance of the army they commanded. Sometimes on the other hand the right to levy the tithe was granted to the so-called *Vaconts* (the property of the churches and religious foundations); but such a privilege tended gradually to die out, until at the time of the Austrian and Hungarian occupation the number of the *Vaconts* which still enjoyed in Bosnia and Herzegovina the right of levying the tithe in place of the State was small.

Having thus generally explained the tithe and the right of levying it we will note more particularly the variations which its value has undergone. Until 1839 it was assessed at the rate of 10 $\frac{1}{2}$ per cent. of the gross value of the products of the soil; after this year it was increased, and in 1878 it represented 12 $\frac{1}{2}$ per cent. of that value. The tax so augmented was distributed as follows: 10 $\frac{1}{2}$ per cent. represented the tithe properly so-called, 1 per cent. was given to popular education, $\frac{1}{2}$ per cent. to the *Zirat* bank, and the remaining $\frac{1}{2}$ per cent. to armaments.

The tithe was paid in kind, because the natural economy of the country always made difficult any attempt on the part of the Turkish government to raise such a tax in money.

In the early period of the Mussulman occupation and as long as there was a state of war in the country the Turkish government found it convenient to levy the tithe directly, the goods thus obtained being destined for

the feeding of the armies in the field. When the acute period of hostilities against the populations of the occupied territories ceased, the Mussulman government thought it well to change this system of levying the tithe. They had recourse to the method of granting to private persons, in return for a fixed sum of money, the right of collecting this tax from those liable to it. Thus collectors for the Treasury were instituted who assured to the State the payment of the tax; and the collectorships were let out at public auction, a sum proportionate to the tax's value being paid as a guarantee.

Ordinarily the value of the tithe incident on every single village was first established, being calculated on the basis of the harvests obtained in preceding years and the harvest anticipated in the current year. When the value of the tithe had thus been fixed the price of a lease thereof was established, that is the price which the grantee of the right to collect the tithe in the name of the State ought to pay to the Treasury, and then the public auction was held.

The cautionary sum which the grantee had to pay in guarantee of his engagements could be in the form either of cash or of State bonds. The actual payment had to be made in three, four or six instalments.

As regards the mode of levying the tax, the individuals liable to it might have recourse to one of the following methods:

a) That of the so-called "proof by single sheaves". By this system the cultivator of a given area of land subject to the tax cut down ears of grain to form a certain number of sheaves. From these a few were chosen and were threshed, and thus the average quantity of grain produced was ascertained. This datum and the number of the sheaves of grain gave a basis for the assessment of the tithe payable by each person liable to it.

b) The second system consisted in taking into account on the one hand the value of the various tithes levied in the preceding year on a given area, and on the other the anticipated value of the harvest in the current year.

c) When the third system was adopted a person liable to the tax was obliged to declare, as soon as his corn was threshed, the quantity of grain he had obtained from the land he had cultivated. After this declaration had been made the collector of the tax investigated its accuracy on the spot and then fixed the amount of the tax.

This last system was certainly the most just; for it came nearest to rendering possible the exact determination of the quantity of the products of a holding subject to the tithe-tax, and therefore of the just amount of this tax incident to such holding. It had however a double drawback, that of necessitating a minute and not easy inspection on the part of the collector, and that of depriving the cultivator of all liberty of action during the time of the harvest. The other two systems were both of them more advantageous to the person liable to taxation, in that they left him more liberty of action at harvest-time, but they had from the State's point of view the special drawback of allowing only of an approximate and anticipatory computation

(1) 1 franc = 9 $\frac{3}{5}$ d. at par.

of the products of the soil, on the basis of which to establish the tithe. Thus these systems always allowed of possible errors in calculation, which were injurious either to the persons taxed or to the collector authorized to levy the tax on the State's behalf.

Persons liable to the tax included not only the cultivators of the soil (*kmeli*) but also the landowner (*aga*), each of them proportionately to the quantity of products to which he had right. From the whole quantity of the products of a given holding that part which belonged to the State as the tithe was taken, one of the three systems described being applied. The remaining products were then shared by the *aga* and the *kmel*, three fourths going to the latter and one to the former.

While the tithe was levied directly by the State, in the manner and for the reason which have been described, it was incident only on land bearing grain crops. All other lands — whether woods, kitchen-gardens, meadows or flower-gardens — were exempt from the tithe, while vineyards, orchards and tobacco plantations were burdened with it only when their products were in excess of the needs of the cultivators and their respective families and were intended for sale.

After the State's right of levying the tithe had been transferred to private collectors the condition of those liable to the tax became worse. This alteration in the method of collecting the tax was in fact accompanied by another alteration: only meadows and woods remained exempt from the tithe, they being otherwise burdened with taxes, and it was levied without distinction on all other lands.

In the period between 1865 and 1871 the Turkish government made various attempts to introduce a new reform into the system of levying the tithe, namely to substitute the method of direct levy by the State for that of the farming by private collectors; but none of these attempts had any practical result.

There are no official statistics as to the total value of the tithe levied on the lands of Bosnia and Herzegovina in the period of Turkish dominion, but Dimitz places it at 6,000,000 francs (1).

2) *The "Sulus" and "Verghia" taxes.* — Besides the tithe two other taxes burdened landed property in Bosnia and Herzegovina in the period of Turkish dominion. The first fell only on real estate (land and buildings), the second only on revenue.

The *Sulus* tax was paid only by the *agas*, the owners of the land and buildings. The system adopted for its levy consisted in the fixing of a total value for each department and the division of this among the various persons liable to the tax, proportionately to the real estate they respectively possessed.

The *Verghia* tax on the other hand fell, as has been said, only on the revenue of each person liable to it, that is of both the *aga* owners and the cultivating *kmeli*. As in the case of the *Sulus* so in that of the *Verghia* the Turkish government fixed for each department a total value which was divided among the various persons liable to the tax in accordance with the wealth of each.

In the second half of last century attempts were made to substitute for these two taxes a single land tax based on the French fiscal system. The attempts had little effect, and at the time of the Austrian and Hungarian occupation the *Sulus* and the *Verghia* taxes still existed quite unmodified in the following departments: Banja-Luca, Focea, Cepce, Gazco, Ljubinje, Trebinje, Petrovaz, Bihatech, Sanskihost, Prijedor, Cazin and Crupa.

In the departments in which the indicated reform was applied the *Sulus* and *Verghia* taxes were superseded by other burdens on lands and buildings. The tax on the revenue of the *kmeti* was entirely abolished.

When the reform in question had been introduced the new taxes on the land were paid by the respective proprietors in proportion to the estimated value of their holdings.

In the case of rural property burdened with the tithe (meadows and woods) the tax was assessed at the rate of 10 per cent. of its value, in the case of other property at that of 4 per cent.

A first tax was incident on buildings, assessed on the basis of their respective estimated values. Only the houses inhabited by the *kmeti* were exempt. Besides the taxes which have been mentioned two others fell upon buildings, one being destined for public education and the other for military expenses.

3) *The taxes on live stock.* — These taxes fell in the period of Turkish dominion only on sheep, goats and pigs, cattle and horses being exempt. The reason for this distinction is unknown. Some have wished to explain it by pointing out that horses and oxen were employed for labour and thus were a means to agricultural production, which was already taxed, and that their exemption was therefore logical.

The tax on live stock amounted to three *grosh* on each sheep and goat and five on each pig. No tax fell on lambs and kids less than a year old.

4) *The military taxes.* — No parallel can be established between the military taxes imposed by Turkey in the period of her domination in Bosnia and Herzegovina and those which the government of Austria and Hungary now exacts from all individuals who, owing to a physical or other defect, are unable to bear arms. Under Turkish dominion military service was considered to be at once the duty and the right of all male persons of the Mahometan population. This right and this duty were not considered to belong to persons of another religion, because, in Mussulman theory, the right to form part of the armies who have to defend the religion of Mahomet includes a species of moral capacity not held by subject peoples and those of a different religion. This conception was responsible for the fact that male persons of Bosnia and Herzegovina were debarred from the honour of bearing arms in the defence of Islam and thus became liable to the payment of a military tax which had all the characteristics of a poll-tax.

But in addition to the military tax falling on the Slav male population of non-Mahometan faith, there was a tax of another kind which was paid by those Mussulmans who for some particular reason wished to be exempt from military service; such exemption never being granted to a Mussul-

man who pled his unfitness to bear arms but only in return for the payment of this tax.

The male Musulman population was called to arms three times at different periods. In the case of each summons the tax payable for military exemption corresponded to 50 Turkish pounds (1). As regards the non-Mahometan population the tax fell on groups of persons in a single locality and not on individuals. Each group of a hundred males of a given villa ge had to pay 50 Turkish pounds, which sum was afterwards divided among the individuals composing such a group in accordance with the wealth each possessed. Priests and males under fifteen or over seventy-five years old were exempt from all military taxes.

§ 2. AGRARIAN TAXES AFTER THE OCCUPATION BY AUSTRIA AND HUNGARY.

The Austrian and Hungarian government, immediately after the occupation of Bosnia and Herzegovina, proposed to solve the agrarian problem as well as possible, and placed therefore at the head of an economic programme the reform of taxation and the redemption of the land in the interests of the *kmets*.

With this aim the opportune work of forming a cadaster was undertaken without delay ; but the nomination of Kalaj as governor of Austria and Hungary caused both the schemes for the reform of taxation and the solution of the problems relative to the redemption of land from ancient feudal bonds to be shelved, because they were contrary to the principles on which the new governor's economic policy was founded.

The fundamental basis of this policy was the maintenance at all costs of internal peace, in homage to which principle Kalaj renounced all projects of reform, however necessary they might be to the country's economic progress. He feared that he might come up against ancient customs, disturb local interests, and thus occasion internal disorder, and he was convinced that taxation could not be reformed without arousing discontent among the whole population : thus during the time of his administration he adhered to Canard's theory that any tax in existence in a given country is good for the sole reason that it has become intermixed with local customs and the local relations connecting the interests of individuals ; and therefore that any new tax is — as a matter of logical sequence — bad because of the sole fact of its novelty. Accepting this theory as a maxim Kalaj did not nevertheless absolutely renounce all reformation but had recourse to half measures which could not produce any really noteworthy advantage. He excluded all that could represent a truly radical reform of taxation and contented himself with retouches which did little to relieve the ancient system in force in the country.

(1) Turkish pound = 18.2272s at par.

During his tenure of office, which lasted for more than twenty years, he introduced in fact only the following changes into the system of taxation inherited from the Turkish government :

1) For the payment of the tithe in kind a payment in cash was substituted. The basis on which this was effected was the market price of the various articles of merchandise representing the tax in kind, and the quantity of these produced on a given holding.

2) For the collection of the tithe by the medium of responsible collectors, as described, the system of direct collection by the State was substituted.

3) The tithes still payable to *Vacouf* properties were made payable to the State. This was effected gradually. At the time of the Austrian and Hungarian occupation these entities so privileged still existed, although their number was small, and until 1911 they are mentioned in official reports.

It should be noted that all the retouching of the old Turkish system of taxation effected under Kalaj's administration was profitable only to the *agas*, to whom the *kmeti* were by old feudal bonds obliged to give a part of the products of the soil they cultivated, that is a tribute in kind, called *Hac* in the language of the country. When Kalaj had introduced his reform it fell to the governor's agents to fix for each holding the quantity of its produce and the share of this which belonged to the State as a tax. This calculation, which had an official source and therefore was not much subject to error, afterwards served the *agas* as a sure basis for establishing the amount of the products of the soil due to themselves from their respective *kmeti*. The latter, as has been said, derived no advantage from the reform of taxation in question.

After the death of Kalaj his successor Burian devoted himself to the task of reforming taxation. He took for point of departure the reform of the tithe, which was considered to be the worst of all the forms of taxation. At first he thought of substituting for it a tax on revenue, but fearing that too rapid a transition from one system of taxation to another might arouse discontent and disorder in the country he preferred a provisional measure, the introduction namely of the so-called *tithe in the block*. This is the name given to the following system :

In the case of every single piece of land to be taxed its average gross product in the period between 1895 and 1905 was ascertained. Such average was multiplied by the average price of a unit of the various products ; and thus a figure was obtained the tenth part of which represented the tax due to the State and payable in money.

For motives of prudence this new system of taxation was introduced in 1905 only in two or three villages of each department. The result obtained was so satisfactory that in the next year — 1906 — the law was passed in virtue of which the system of the *tithe in the block* was adopted as the official system of taxation applicable to the whole country except the districts which still lacked a cadaster.

This reform met with favour above all from the *kmeti* because the dif-

ference between the quantity of products which they obtained from their respective cultivated holdings, and the quantity of such products officially certified by the agents of the State, remained exempt from any tax to the Treasury and any feudal contribution to the *agas*,

Among the different secondary reforms adopted, other than that of the *tithe in the block*, we note the following :

1) The perpetual exemption from every tax on their products of vegetable and other gardens near dwelling-houses, if they have an area of no more than a dunum (1).

2) The temporary exemption for ten years of lands recently brought under cultivation.

3) The temporary exemption from taxation of lands granted to colonists, whether these belong to the population of the country or be of foreign nationality.

4) Partial or total exemption from the tithe in bad years.

5) The total exemption from taxation of the products of vegetable and other gardens cultivated by soldiers or fiscal agents, provided such products be not intended for sale.

6) The total exemption from taxation of lands of the State cultivated with a view to their improvement.

It may be stated more precisely that the system of taxation here described is applied, with the exceptions previously indicated, to products of all arable lands and to those of apiaries. As regards woodlands these also are burdened with the *tithe in the block*, calculated on their net return based on the data in the cadaster.

The reform of taxation which we have described was initiated in 1905 and terminated in 1907. Its application was prorogued only in the four departments of Biletsch, Bazco, Ljubinje and Trebinje because all these lacked a cadaster. The expenses relative to the reform of taxation amounted to 1,600,000 crowns (2) As regards the expenses of collection these were by the new system diminished by 70 per cent. in comparison with those involved by other methods of collecting taxes.

The old *Sulus* and *Verghia* taxes, to which we have already alluded and the abolition of which was begun while Turkish domination was still in force, were little by little replaced by taxes on returns. In fact in the official report for 1911 these taxes are mentioned only in relation to the five departments of Zepč, Gasko, Foca, Ljubinje and Trebinje, while in all the others the new taxes on land, buildings, moveables and the returns from labour had already been applied in this period.

The new land tax was planned as an improvement to be introduced into the system of collection represented by the tithe. It should be regarded as the beginning of the reform of taxation in Bosnia and Herzegovina, a reform which aims at causing the incidence of taxes on proprietors and not on cultivators and at making the real value of the land the basis of taxa-

(1) 1 dunum = about 1091 $\frac{1}{2}$ square yards.

(2) 1 crown of gold = 10.0809 d at par.

tion. The tax in question is one of 4 per thousand. In the district of Banja-Luka it is calculated on the net return of the land as given by the cadaster and it is there 3.6 per cent.

The tax on buildings has the same characteristic features as that on land. Like the latter it falls only on the *aga* proprietors while the *kmeli* are exempt from it. Buildings newly erected are not taxed for a period of from five to ten years.

The basis of the tax in question is the estimated value of the buildings. Since all such estimates made in the time of the Turkish government are entirely inexact, recourse was had to a commission charged to rectify errors in calculation and to establish a new and more accurate general estimate of the property in question, and at the same time to make a cadaster. This tax is one of 4 per thousand of the estimated real value of taxable buildings, or — if they be let — of 4 per cent. of their rent.

As regards the tax on live stock it may be said to be the same as under the Turkish government. It falls only on sheep, goats and pigs; cattle and horses being exempt from it. Its amount has however been modified with the intention of promoting the rearing of sheep and diminishing that of goats. The amount is as follows :

For every sheep in a flock 20 hellers (1) are paid, but for each person liable to pay the tax ten sheep are exempt from it, as are all lambs. Where goats are concerned the tax varies, with districts and with the number of the goats, from 40 hellers to a crown. Moreover the tax is progressive : for the first ten goats it is 40 hellers, for the second ten 45 hellers, and so on. This rate is not applied in Herzegovina. For kids under a year old no tax is paid. Pigs are taxed at the rate of 60 hellers each. The tax on live stock is in general paid in three instalments, in March, April and May.

The amounts of the various taxes examined are indicated in the following table which has reference to 1910 :

	Crowns
Total value of tithe	8,853,000
" " " the taxes <i>Sulus</i> and <i>Verghia</i>	69,800
" " " " tax on land	847,300
" " " " buildings	1,028,900
" " " " sheep and goats	779,800
" " " " pigs	67,000
	<hr/>
	11,645,800

A part of the total value of all the taxes, seen by this table to be 11,645,800 crowns, falls only on the agricultural population, namely

(1) 10 hellers = about 1d at par.

10,543,100 crowns, which sum comprises the tithe, the land tax and the tax on live stock.

The remainder, namely the sum of the tax on buildings and the *Sulus* and *Verghia* taxes, falls both on the agricultural and the urban populations.

Both also pay indirect taxes. It is very difficult to determine in what proportion these two classes of the population of Bosnia and Herzegovina contribute respectively to the payment of indirect taxes. Only an approximate calculation can be made, based on statistical data relative to the total sum of the indirect taxes levied in 1910. The following table results :

Taxes on tobacco	17,429,000
Dues and registration	4,063,835
Taxes on sugar	3,977,017
" " salt	3,259,900
" " spirits	2,647,207
" " mineral oils	809,555
" " beer	569,688
" " gunpowder	33,451

As appears from these statistical data, indirect taxes in Bosnia and Herzegovina fall on articles of general consumption, namely such as are consumed as much by the rich as by the poor population, some of them — like salt and spirits — more by the poor than by the rich. We may therefore conclude with the statement that the agricultural population of Bosnia and Herzegovina is burdened with indirect taxes in proportion to its numbers. The taxed portion of the population may, according to the last census, that of 1910, be stated to constitute 86.57 per cent. of the whole.

The statistical table which follows shows the movement of indirect taxation from 1881-82 and through the succeeding quinquennial periods until 1910 :

	1881-82	1885	1890	1895	1900	1905	1910
Tithe	4,854,000	5,925,000	8,113,000	8,404,000	7,733,000	8,976,000	8,853,000
<i>Sulus, Verghia</i>	323,100	356,600	357,700	69,700	69,200	69,400	69,300
Taxes on lands	586,400	465,000	479,200	700,400	719,500	759,300	847,300
» buildings (1)	219,100	215,000	273,600	429,900	578,400	603,500	739,200
» (2)	59,300	68,300	86,600	124,300	149,100	227,200	286,700
» sheep & goats	442,200	708,200	691,100	892,300	811,300	820,000	779,800
» pigs	77,900	102,500	121,700	140,800	95,400	86,100	67,000
» tobacco	3,500,900	4,746,000	8,512,000	9,533,000	10,027,000	12,278,000	17,429,000
Various taxes	716,188	1,268,124	1,349,899	1,582,691	1,923,113	2,381,707	4,063,835
Taxes on sugar	—	—	—	345,994	1,696,759	2,765,000	3,977,017
» salt	—	—	2,146,000	2,264,000	2,639,000	2,899,000	3,259,900
» spirits	52,000	159,000	606,000	1,234,000	1,603,000	1,609,000	2,647,207
» mineral oils	—	—	—	610,904	575,146	471,000	809,555
» beer	13,130	22,962	74,772	216,876	282,000	395,000	569,685
» gunpowder	—	30,651	39,373	24,329	37,511	33,151	33,451

(1) Taxes on the value of buildings. (2) Taxes on the rent of buildings.

GREAT BRITAIN AND IRELAND.

AGRICULTURE AND THE WAR.

SOURCE:

THE JOURNAL OF THE BOARD OF AGRICULTURE, Vol. XXIII. Number 8, London, November 1916.

At Taunton on the 28th of last October the members of the Somerset War Agricultural Committee and others were addressed by Lord Crawford, then President of the Board of Agriculture and Fisheries.

Lord Crawford first alluded to the difficulties at present attendant on agriculture, those connected with labour and tillage, with the late harvest which meant a late autumn, and above all with the feeling of uncertainty which hung over agriculture.

It was the object, not only of farmers but also of the whole country in relation to agriculture, to obtain more food. Ten years ago agriculture had been looked upon by the country at large as an industry; now it was recognized to be a source and foundation of national strength. Ten years ago agriculture had been merely a commercial occupation, and not always a very brilliant one; now it was one of the weapons by which Britain meant to win the great war. To realize the want for more food was almost a discovery to the British public. Hitherto food had reached the country somehow and from somewhere — it had not been the business of the consumer to enquire how, when or whence it came. Too often he had closed his eyes to those who pointed out the danger of allowing agriculture to be neglected and to decay. Now he was beginning to find not only that more food was needed, but also that the source and origin of that food was one of its essential values when it was required by the consumer.

Every quarter of corn that was imported weakened the country and every quarter grown at home conferred strength on the country. If corn were bought abroad it was paid for abroad. During the war the one transaction of all others which it was desirable to avoid was that of sending money abroad to purchase articles which could be produced at home. Such a course weakened the British exchange, diminished British financial resources;

and the financial resources of the country were one of the great weapons with which Britain was fighting the war. To buy corn abroad was, further, to make a call upon the mercantile marine which could be used for more profitable transactions; and it was to requisition fresh labour after the corn had been imported, for unloading at the docks, reloading into trains and distribution. Thus the importation of corn stuffs during the war was not a strength but a weakness to the whole country.

Wheat. — The country depended on two fundamental foodstuffs — wheat and meat — and the last harvest had shown a serious decrease in the area of wheat as compared with 1915. Last summer, in England and Wales alone, the area under wheat which had been harvested had been less by more than a quarter of a million acres than in 1915, and the average yield over the reduced acreage would probably prove to have been considerably less than in that year (1).

It was essential, with a view to the prospects for next summer, that the maximum area should be planted with wheat in the coming months. Although it was probably impossible to match the high results of 1915, what could be done should and must be done. To plant wheat would pay the farmer, for prices would be remunerative next August even if peace were declared at Easter, and it would pay the country. It should be remembered that the only basis on which the Board of Agriculture could press for the retention on the land of all possible labour, was that the labour now available was being used to the utmost in the national interest, regardless of whether the ultimate profit were going to be large or small.

Live Stock. — In Somerset the work started by the Board of Agriculture in connection with the Live Stock Improvement Scheme had been taken up as successfully as in any county in England, if not more so. The first grant under the scheme was made only six months before the war broke out, yet Somerset was now earning the maximum grant which the Board was entitled to pay, namely £1,000 a year.

The live stock societies in the county owned seventeen subsidized boars, averaging £7. 6 s. in value a piece, and thirty-four bulls averaging over £40 in value a piece, and their record as to Shire horses was good. The improvement effected by the Live Stock Scheme was illustrated by the fact that these bulls replaced others, existing before the scheme, of which the average value certainly did not reach £25.

The first milk recording society under the Board's scheme was established at Cadbury in April 1914 and its members and others had realized that a milk recording certificate had a definite commercial value. There were two other milk recording societies in the county; and all three had — in spite of shortage of milkers and other war difficulties — made satisfactory progress.

(1) The preliminary statement issued by the Board of Agriculture on 1 November 1916 showed the total production of wheat in England and Wales in 1916 to have been of 6,942,559 qurs. — that is less by 1,500,000 qurs. than in 1915 but more than in 1912 or 1913.

This improvement in the matter of live stock had not only a local importance, for live stock was going to present one of the great problems of the future. It was not yet sufficiently realized in the country how much more, as time went on, Britain would have to depend on her own resources. A very short time ago the United States of America had been an enormous exporting country. Per head of the population it was the biggest meat-eating country in the world. Great Britain was the third greatest meat-eating country in the world and the largest in Europe; her requirements, already gigantic, showed every sign of increasing; and while that process was going on great exporting countries like the United States of America were finding it more and more necessary to reserve their meat for their home populations. Therefore although new markets would naturally tend to develop elsewhere — in America or Africa, for instance — fresh demands would be made upon the stock owners and stock breeders at home. There had too been the ravages of war — the flocks and herds in certain parts of Europe had been devastated (Germany herself had, since the war had begun, lost a million head of stock). The obligation upon the nation to use every means at their disposal to supplement and to maintain their flocks and herds was plain.

On 5 June 1916 the annual records had been compiled by the Board of Agriculture. There were then in England and Wales a larger number of head of cattle than at any recorded date. So strong an economic position after two years of war was astonishing. In the succeeding four months the figure had probably been lowered; yet during war time, and in view of the extraordinary figures discovered on 5 June, the country was entitled to some extent to draw upon its capital. It was greatly to be hoped however that, although war pressure would drive in that direction, agriculturists would not yield to the ready temptation of high prices and diminish or disperse their herds. A good herd was now a good asset but it would twelve months after the declaration of peace be a still greater and more precious asset. Every head of cattle which could be maintained over the war was strengthening the country as a reserve during the war, and would greatly add to the strength of the country and its power of recuperation after the war.

Wheat, live stock and crops depended however, alike, on adequate labour. The speaker stated that there was plenty of evidence of the inadequacy of labour to maintain the normal standard of cultivation.

Labour Shortage. — The official returns of 5 June 1916, already mentioned, showed an increase of 112,000 acres in the land lying in bare fallow this year, as compared with the previous year. The speaker was in no doubt that this increase was due to labour shortage; and bad labour shortage meant bad cultivation, bad cultivation meant poor yields and meant dirty land, which meant that two or three or even four years would have to pass before the qualities of the soil could be fully restored.

The army said that it wanted more men, the nation that it wanted more food, the farmer that he wanted more labour: yet we were not asked to reconcile the irreconcilable.

War Office Circular, 4 October 1916. — In the circular sent out by the Army Council on 4 October 1916 it had been decided that, subject to certain conditions, "no more men from amongst those now employed in agriculture will until January 1st, 1917, and in the case of men whose whole time employment on a holding is necessary for maintaining milk production, till the 1st of April 1917, be called to the colours, except in return for men released from the colours for work in agriculture". This was so much gained, and so much time in hand which was valuable time for husbandry. For every acre of wheat sown in the spring in the country as a whole, fifteen acres were sown in the winter. The ploughman was indeed as necessary after as before 1 January, but wherever it could be shown that he was necessary and within the scale for the cultivation of the land the Board was anxious that he should be retained.

War Office Census. — The War Office was going to take a census of male and female workers employed on agricultural holdings; and the returns were to be received about 15 November. The object was to enable the military authorities to survey the whole position of agricultural labour and ascertain whether the available labour were sufficient, excessive or deficient. It was the speaker's impression that the census would show that not only were few men employed over the so-called Labour Scale but that also in many districts the number of men employed was well below that scale. It was not and never had been a fixed, rigid rule. It was intended to serve as a general guide to the authorities, not necessarily versed in agriculture at all, as to what labour should be properly left upon the farms in order to ensure a reasonable scale of cultivation.

The Labour Scale. — A question had been asked as to whether the Labour Scale were permanent. Nothing in time of war could be said to be permanent, but the Labour Scale would not be altered unless the military situation demanded its alteration. Its terms were set out in full in the circular lately issued by the War Office on the subject. In the official book on registration and recruiting issued by the War Office to their officers the Labour Scale was also set out, and was preceded by this announcement: "The necessity of procuring food, if possible in excess of the usual production, should be appreciated by all recruiting officers and military representatives". Elsewhere it was said: "The military representatives are specially enjoined to watch the list of certified occupations, and to carry out the spirit of the instructions laid down by the various departments concerned". In the same way the Local Government Board had said in their recent communication to the tribunals: "Particular attention should be paid to the official list of certified occupations, which states the classes or bodies of men engaged in agriculture whose work has been certified after consultation with the Army Council as being of national importance". The Labour Scale was a rough and ready guide but it represented the minimum amount of labour necessary for proper husbandry in time of war. The War Office could not give a guarantee that the Labour Scale would be maintained intact, but the quotations from their own circulars showed that they understood how necessary the Labour Scale of employment on that stan-

dard was for the due cultivation of the land. The farmers must trust the Board of Agriculture to do their utmost, even if and even when the utmost of a government department did not fulfil all their expectations.

The Board of Agriculture had long since laid their whole case before the new authority, called the Man-Power Distribution Board, which had been set up by the government. The Board of Agriculture investigated every case of hardship sent up to it, cases of hardship — and sometimes indeed cases of injustice — being unavoidable. Since in England and Wales there were no less than 1,850 separate Tribunals, disparity of treatment was inevitable. It was however the duty of the Board of Agriculture — and one which they fulfilled — to refuse to intervene in favour of the farmer when they did not think he was playing the game by the country and by the army.

Substitution of Labour. — The War Office proposed to withdraw no more men from among those employed in agriculture — before January or April as the case might be — unless substitutes were sent to replace them. Substitution was to take place in all industries, not only in agriculture. In every district a Substitution Officer was going to be appointed by the military authorities; many had already been appointed. The Substitution Officer had prepared lists of possible substitutes, who were men now serving in the Reserve — soldiers who were, for instance, looking after railway bridges or watching munition works. The lists of substitutes were classified according to districts, and many were actually being sent out to Substitution Officers in different parts of the country. The Board's representative or any authorized person was at liberty to see these lists: he could look up a particular districts and see what reservists could be sent to replace young and able-bodied men now working on its farms. The substitute might be less efficient than the man he replaced. He would probably be twenty years older; but he would be a trained agriculturist and would belong to the district, for the Board of Agriculture had told the War Office that it was no good to send a Yorkshiremen to work in Dorsetshire or a Dorset man to work in Yorkshire. In many cases it was hoped to arrange that the reservist would come back to his own village and his own home, where his family was, and work in the occupation in which he was working on the day war broke out. As regarded his wages, it would be the duty of the Board's agricultural representative and the Area Commander to see that these were fair and in accordance with the rates ruling in the district.

Adjustment of Differences. — Any difference which might arise between a farmer and a reservist would be dealt with by the Area Commander, if necessary in consultation with the agricultural representatives. If the difference could not be adjusted and the man were recalled to the Reserve, the War Office had promised to do their best to ensure that another substitute would be found, if it were clear that the fault was not on the side of the employing farmer. The following sentences in the War Office circular to officers commanding recruiting areas should be noted: "It must be borne in mind in dealing with the whole of this question that all parties concerned must be prepared to work together if the scheme is to be successful." The farmer

should be informed of the real urgency that exists for general service men when he is approached with a view to substitution. The man should be instructed that he is being sent back to work at agriculture, primarily not for his convenience or advantage but to assist his country in the war; and that petty discomforts inseparable from such a scheme are not to be made the subject of frivolous complaints to officers commanding areas, or to be used as an excuse for not rendering the best service possible to his employer."

Dilution of Labour. — Dilution of labour was essential to success in the war. It was not adequate in England as it was in France. To the speaker it had been a miracle to see how French women and children and old French people had succeeded in maintaining the standard of cultivation in France right up to within a few hundred yards of the firing line. It was a marvelous tribute to the perseverance and to the courage of that race, and all who had been to France and any soldier who had returned would tell that it filled the British army with respect and admiration. The same thing could not be achieved in England but a great deal could be done towards it. Labour had not been too plentiful at the beginning of the war, and since then the number of labourers had enormously decreased. At the outset only nine per cent. or so of the male population had been engaged in agriculture. There still remained part of a nucleus, with which the country started when the war broke out, of men under and over military age. At the last census there had been 153,000 persons occupied in agriculture below the age of eighteen and 405,000 over the age of forty-one — in other words 558,000 persons out of a total agricultural figure of 971,000 not subject to military duty. Many of these had been lost. Some had since the census attained military age; others, above military age, had gone elsewhere — perhaps, indeed, joined the army as volunteers or as reservists. But it should not be forgotten that there was that central nucleus around which the diluted labour must be distributed.

Occasional Soldier Labour. — The speaker thought the fact had been rather overlooked that soldier labour could still be obtained by farmers. Not only for the corn harvest but at any time the Employment Exchanges would send soldiers for occasional labour. A farmer living in the neighbourhood of a military station might apply directly to the commanding officer for military labour which he required at short notice and for a period not exceeding six working days. This might enable the farmer to take advantage of fine days or short intervals of fine weather suitable for work. Not more than four consecutive weeks' furlough could be given to any one man obtained through Employment Exchanges.

Convalescent Soldiers. — Convalescent soldiers were another source of labour. The depot at Chichester of the Royal Sussex Regiment — one smallish depot in one particular county — had in the last two years sent out convalescent soldiers for light agricultural work for the aggregate of 22,000 working days of labour.

Training of Children in Milking. — The question as to whether children could be employed and instruction given to them in milking was one primarily for the local Education Authority and belonged to their control

of secular education under Section 5 of the Act. If, when the local Education Authority thought it desirable to give such instruction, a satisfactory scheme for the purpose were submitted to His Majesty's Inspector, the Board of Education would be prepared to approve it experimentally.

War Agricultural Committees. — The last and one of the most difficult aspects of the labour question was that of women's work. The provision of local work must largely rest in the hands of the War Agricultural Committees and the Women's County Committees. Some of the War Agricultural Committees were as active, zealous and efficient as anybody could desire ; others were not. There were War Agricultural Committees in the country which did not meet for four or five months during the summer ; and they were committees which did not understand their duty and were not fulfilling their responsibility to the State. Where committees were weak they must be strengthened : members of them who could not attend must be replaced by others who could and would attend ; new members should be added whenever necessary, including, wherever possible, farmers of experience and judgement ; women should certainly be co-opted to the War Agricultural Committees, just as these should work in the closest co-operation with the Women's County Committees.

Women's County Committees. — The Women's Committees had hitherto been closely associated with the Board of Trade. The Board of Agriculture had been in conference with the Board of Trade and the conclusion had been reached that it would add to the efficiency both of the men's and of the Women's Committees if the latter were more closely connected with the Board of Agriculture than in the past.

There was great scope for the Women's County Committees and they had to overcome great difficulties. Women's work was not very easily obtained, and the committees would probably find that one of their first duties was to strengthen the personnel of the Village Registries. The parish was after all the local unit, and it was from the parish that the bulk of the women's work would be drawn. Although much valuable work had been done by importing women from other parts of the country it was on the local women that dependence must be placed, and they must be secured through the parish or the parish registry, a source of labour which must be supplied through the Women's County Committee. The speaker expressed a hope that the various committees would have the help of officers of the Board of Trade who would be called co-operating officers and work in co-operation with the Board of Agriculture ; and stated that his Board was approaching the Treasury to secure that the Women's Committees should have proper payment for their clerical and other work.

Women's Work. — Lord Crawford referred to the prejudice existing among farmers against women's work, and stated that it was natural in view of the short period for which, in most parts of the country, they had devoted themselves to farm work. It was not surprising that their efficiency, quite apart from physical conditions, should be less than that of trained men. The speaker was however convinced that if, with proper care and training, the women could be given a similar chance to that which

civilians had had since 1914 to become soldiers, the assistance they would render in the classes of agricultural work for which they were fitted would be proportionately great. Two years ago there was not a woman in the country who knew anything about making ammunition, but now it was upon the women that the nation largely depended for the output of shells and munitions. Even if their work did not conform to the standard to which agriculture was accustomed before the war began, it was necessary, in time of war, to use every class of labour which circumstances allowed.

Lord Crawford concluded his address by an appeal for "no waste, no relaxation of energy or effort, no reservation, no rest".

ITALIAN SOMALILAND.

LAND TENURE AND COLONIZATION.

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§I. GENERAL REMARKS. ADMINISTRATIVE ORGANIZATION OF ITALIAN SOMALILAND.

A. — General Remarks.

The peninsula of Somaliland lies between longitudes 42° (River Ueb, tributary of the Juba) and 51° 16' (Cape Gaurdafui), east of Greenwich, and latitudes 12° (Cape Alula) and 0° 8' (Gulf of Juba) N.

The territories in Somaliland included in the Italian possessions, protectorate or zone of influence extend as follows :

a) From the Gulf of Aden and on the east coast of Somaliland, bordering the Indian Ocean, from Bender Ziade (49° long. east of Greenwich) to the Gulf of Juba (about 0.°15' lat S.) along a coastline of about 2,160 kilometres (1).

b) In the interior in the region comprised within the boundary line determined with respect to British Somaliland by the protocols between Great Britain and Italy concluded in Rome on 24 March and 15 April 1891

(1) 1 kilometre = 1093.633 yards.

and 5 May 1914, and with respect to Ethiopia by the treaty of 16 May 1908 which established the Italo-Ethiopian frontier in Somaliland.

As regards the area and population of this vast region, we will omit the figures given in the Statesman's Year Book and the Almanach de Gotha, by Ghisleri in his Atlas of Africa, by Supan (1), and others — figures which agree little with each other — and merely note that the last *Annuario statistico italiano* (2nd. series, Vol. IV, 1914) stated that the interior of the colony had an area of 357,000 square kilometres and a population of 300,000. In the *Relazione sulla Somalia italiana* — the report of the governor, G. De Martino, senator of the kingdom, for the years 1911 and 1912 (2) — the following specific data are given with regard to the area of Italian Somaliland :

Area of the colony in May 1910.	30,000	square kilometres
" " " " after the new occupation		
in March 1912	25,000	" "
" " " " after the projected occupa-		
tion	80,000	" "
" " " zone of influence — in which gov-		
ernment nominates and		
pays chiefs — in 1912.	17,000	" "
" " remaining territory in which chiefs		
have not yet been nominated	37,000	" "
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Total area of colony	189,000	" "
Area of Protectorate	168,000	" "
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Total area of Italian Somaliland	357,000	" "
Area of Italy	286,000	" "

B. Administrative Organization.

At present Italian Somaliland is placed under an administration directed by the State and regulated by the law of 5 April 1908 no. 161 (3).

The whole colony is ruled by a civil governor, nominated by royal decree on the proposal of the Minister of the Colonies advised by the Council of Ministers.

The governor is represented in the various districts by Italian residents who act in his name and on whom the troops of their respective districts depend politically.

(1) *Die territoriale Entwicklung der Europäischen Kolonien* (The Territorial Development of the European colonies). Gotha, J. Perthes, 1906.

(2) Presented to the Chamber of Deputies at the session of 4 December 1912.

(3) Law of 5 April 1908 no. 161 on the organization of Italian Somaliland. *Gazzetta ufficiale del Regno* 30 April 1908, no. 102.

Italian citizens and those assimilated to them are subject to Italian law. Colonial subjects and those assimilated to them are judged according to the rules of Mussulman law (*scerio*) in force in the colony and customary native law (*testur*), and according to the various religious prescriptions and customs. The colony must submit its own balance-sheet to the approval of Parliament by the medium of the Minister of the Colonies. By a royal decree of 4 July 1910 no. 592 (1) the administrative order of the colony, which regulated in particular and in detail the military and civil staff (duties, admission, promotion, leave, prospective and actual, discipline, allowances) was approved. Finally by a governor's decree of 5 May and 30 November 1910, published in the *Bollettino ufficiale della Somalia italiana* (Nos. 1 and 5) the distribution and organization of government offices was determined.

The colony's territory was divided into zones, at the head of each of which was a commissioner's office (2). The political and administrative direction within the zones of their respective jurisdictions belongs to the district commissioners on whom the residents depends. The zones are constituted as follows :

1. District of High Juba
2. " " High Uebi Scebeli
3. " " Middle "
4. " " Goscia and of Low Uebi Scebeli.

Each district is divided into residencies and vice-residencies, the number of which grows every year and which are instituted as soon as the political conditions of the various zones are such as to render the extension of the direct administration and of Italian authority useful and opportune.

The governor exercises his function through the medium of the government office and the residents.

In accordance with the governor's decree of 5 May 1910 No. 488, the following are within the competency of the governor's office :

1. The direction of civil affairs ;
2. Consultation, namely a) legal consultation, b) consultation as to public works, c) as to agricultural works.

The suppression of the office of the agrarian direction of Mogadiscio (governor's decree of 6 May 1910, no. 491) was contemporaneous with the nomination of a consultant on agricultural works who should be a member of the government.

There are also in the colony offices for the direction of matters of health, civil engineering, the port, the customs and the Post Office. Commercial inspectors may be assigned to places outside the colony's boundaries.

(1) *Gazzetta ufficiale del Regno*, 18 August 1910, no. 192. — *Bollettino ufficiale della Somalia Italiana*, 31 August 1910, no. 2.

(2) Cf. The *Decreto governatoriale* of 15 January 1912, no. 814, which approved the rules for local district administration (*Bollettino ufficiale della Somalia italiana*, 31 Jan. 1912, n. 1). For the institution of district commissariats see the *Decreti governatoriali*, 5 May 1910, No. 488 and 6 April 1912.

The colony's "experiment in agrarian management" was set up at Genale in Middle Scebeli with the best results, and there is another flourishing government experimental farm at Caitori.

§ 2. AGRICULTURAL CONDITIONS IN SOMALILAND.

Somaliland is a fairly fertile country. The most varied crops do excellently (dura, maize, beans, sesamum, greens of every kind, indiarubber, cotton, agave sisalana, palms, cocoa, papaw-trees, Kapok, forage grasses, etc.), and seeds sprout within a short time even on the most desert land, while so long as they are watered by rain or irrigation the plants rise to heights unknown elsewhere — a proof of the fertility of this soil which is formed of the alluvial deposits of centuries modified by meteorological agents, and provides potent elements of fecundity which few districts of East Africa can match.

Among crops which can give a large return cotton certainly stands first, both for quality and quantity. Dr. Onor, agricultural consultant for Italian Somaliland, expressed himself as follows with regard to the cotton obtained at Caitoi on the Scebeli (1):

"The quantity of fibre obtained at Caitoi was considerable in relation to the cultivated area. From about 5,800 square metres (2) of cultivated land 459 kilogrammes (3) of fibre were obtained, which gives the high average yield of 790 kilogrammes a hectare (4). The cotton was shelled with rudimentary native appliances exactly like those I have seen in Apulia, which leave a small portion of the seed mixed with the fibre but not enough to cause any important variation in the figures I have given. The yield would have been even superior if parasites had not done damage after the first harvests. It is my conviction that in favourable years the harvest might surpass the rosier expectations and surpass by much the average of 900 kilogrammes a hectare which is that of Egypt's maximum yield. This is easy to understand because in Benadir the vegetation is not impeded by a fall in the temperature at the time of harvest. Certainly the American average of 200 kilogrammes a hectare and the Egyptian average of 400 kilogrammes would normally be surpassed."

These remarks refer to Afifi cotton. The following information was given, in an interview reported in the English papers, by Mr. Henry Powell, director of British agriculture in the colony of British East Africa, a most competent person. In speaking of the experiments made by the State at Alessandra on the Juba he made the following statements, equally applicable to agriculture in the adjacent Italian colony.

(1) Statement No. 4 in *Relazione sulla Somalia Italiana per gli anni 1911 and 1912. Documenti*. Rome, Tipografia Camera Deputati, 1912.

(2) 1 square metre = 1.196 square yards.

(3) 1 kilogramme = 2.2 lbs.

(4) 1 hectare = 2.47 acres.

"A plot of about one acre was planted with Abassi cotton and completely irrigated, with the object of showing the capacity of the soil in the most favourable conditions and with the best possible agriculture. Over one half of the land the furrows were traced at intervals of thirty-four inches and the seed was sown on 6 May at intervals of eighteen inches. On the other half the furrows were made at intervals of thirty inches and the seed distributed at intervals of thirty-four inches on the same day. The development of the plant was marvellous on both areas. Mr. Filleul, vice-commissioner of the province, found however that the closer plants did best, owing to their greater density which allowed the bushes to resist the strong winds prevalent in Alessandria. Three thousand pounds of seeded cotton were harvested in this irrigated area (Alessandria) producing 1,000 pounds of fibre. In view of the purposes which it can serve the value of the fibre can be placed as low as 6*d.* a pound, at which rate the sale will produce nearly £30." Mr. Powell says that "existing conditions in Alessandria are however extraordinary". He recommends the place as the site of experimental farms, thus completely recognizing its great fertility. "From the analysis of a specimen of the earth made at the Imperial Institute it appears that the soil is perfect. In such a soil crops would rapidly flourish, helped by the fertilizing waters of the Juba. Thus the large yield of cotton is comprehensible, and it is to the interest of capital and of the colonists of all nations who ought to come to the country — and be induced to come to it — to give to Jubaland that energetic development for which she offers so rich a soil and such abundant waters". Such are the uniform conclusions to which agricultural experts in the British and the Italian colonies have come as to cotton growing, which is the true and the most productive form of agriculture in this land.

Other crops might be no less rich and promising if this extraordinary fertility of the soil were supported by an essential condition — irrigation.

Although native crops (*dura*, maize, *sesamum* (1) beans) can be grown in good years and bad years, with periods of abundance and periods of scarcity by means of the rain and the small canals which the natives assiduously make along the rivers, to receive the waters in times of flood, crops having a large industrial yield — such as cotton, indiarubber, tobacco etc. — cannot run the risk of more or less rainy seasons. The rivers — the true irrigating channels — are natural reservoirs against the variable rainfall, and since the rivers are full precisely in the rainy season a system of mechanical hydraulics is necessary, especially for raising and barricading the waters, in order better to regulate and utilize the rivers. The value of the colony cannot be realized by its agricultural and industrial development apart from the factor indispensable to such development, namely irrigation by canals, dykes and mechanical means. But on the other hand it is certain that the great productiveness can meet the expense these works would entail and richly compensate for it. It is also necessary to recollect that the River Scebeli provides sufficiently favourable conditions for uncultivated

(1) Half a hectare (1.235 acres) planted with *sesamum* on the farm of Genale produced a crop sold at Merca for 200 rupees — £13.6*s.* 3*d.*

hydraulic works which will regulate and dam its course, at least in the region of High Goscia which is among the most fertile in Somaliland.

The extent of land available for cultivation by white colonists is very great if the sparse population and the slightness of native agriculture be considered, but is limited not by area but by the volume of the waters of the rivers in the season of scarcity. This limitation can be partly corrected by artificial dikes and reservoirs, and also by the results which may be yielded by the investigations — as yet incomplete — into the nature of crops and the sowing seasons, and which will show how to derive the greatest possible profit from the rainfall, the irrigation from the rivers being regarded as a supplementary resource. It is clear that to reach this result it will be necessary to confront the vast and complex problem of a general utilization of the rivers, which now follow their unregulated courses, wandering through the plains as chance has willed it.

It would be interesting to review more fully the various crops which flourish or might flourish in the colony of Somaliland, but to do so would take us too far beyond the limits of this study. For information on this subject we refer the reader to Statement 4 in the Report on Somaliland of Governor De Martino (*Documenti*, Rome, Chamber of Deputies, 1912, pages 146-190) in which Dr. Romolo Onor very adequately analyses, in a study called "Notes on Agriculture", the facts as to the various crops, namely cotton, tobacco, maize, sesamum, arachidis, beans, forage grasses, india-rubber, kapok, cocoa-palm, agave sisalana and other lignous plants; and also to the Acts of the Second Congress of Italians Abroad, Vol. I. Part III. Pages 1431 - 1567 (Rome. Tip. Ed. Naz. 1911).

As regards natural vegetation, subdivided into forest and undergrowth, we will say briefly that the only forest properly so-called extends along the Juba for a distance of about a hundred kilometres and has an average depth of no more than 200 metres (1). It is clear therefore that forests of forest trees in Somaliland are very unimportant. Beyond this stretch along the Juba and others like it but of less area, found at several points along the Scebeli, there is in Benadir a monotonous arboraceous vegetation, little developed and very thorny, chiefly bushes. On the whole it is the opinion of competent experts that the resources to be derived from the spontaneous vegetation of Italian Somaliland are very limited.

B. — *The Raising of Live Stock.*

Somaliland is a country well suited to pasturage. There is excellent pastureland, all on the plain, and of interminable extent. Since the dry season lasts only for about four months in the year it is clear that the raising of useful live stock is the most important feature in the country's economy.

The capital in live stock is indeed considerable. Statistics which the colonial government has been enabled by the district authorities to prepare show that in Southern Somaliland alone there are about 764,000 head of

(1) 1 metre = 1.094 yards.

cattle, 305,000 camels and 216,000 sheep. Thus the quantity of live stock is indubitably such as to justify the care given by the colonial government to this form of wealth, and any initiative which might lead to its exploitation in the interest of the home country. In Somaliland Italy has an enormous breeding park which might, with suitable care and improvement, ensure to her an important annual contribution in the form of excellent butcher's meat. But in order that the value of this reserve may be realized its quality must be improved, by protecting it from certain constant and powerful agents of depreciation, and it must be more actively commercialized.

As regards cattle alone the average weight a head of the fully grown animals is more than 400 kilogrammes, and the market price was, before the war, 10, 16 and 24 Maria Theresa thalers (1) a head, according to whether the purchase was made in the interior or on the coast. That is to say that in the least favourable case, allowing for only 50 per cent. of the living gross weight and for the maximum price, meat was sold on the coast for 27 liras a quintal (2), without taking into account the skin, the price of which is being lowered. Indisputably these prices justify a confidence that there could be trade in meat with Somaliland and that, in view of the prices on European markets, it could be remunerative in spite of costs of transport, and the increase in cost price which would be caused by a demand and by other circumstances peculiar to commerce.

Before the war slightly more than 3,000 heads of cattle and about 8,000 sheep were annually exported from Benadir. The skins of the exported oxen, which may furnish another element of profit to be taken into account, weighed 405,000 kilogrammes. Probably a considerable number of them emanated from the districts of Abyssinia which lie below Lugli. Such weight corresponds to 58,000 head of live stock, if seven kilogrammes be taken to be the average weight of a dried skin (3).

§ 3. THE LAND SYSTEM.

From the administrative point of view the process of colonization may be considered to have two stages, the one subordinate to the other: first the determination of the lands which are the State's free property, and then the regime of agricultural concession. Obviously the State must determine the available domain, that is to say the lands which can be granted for colonization without injury to the rights of third parties, before it makes agricultural concessions.

(1) 1 Maria Theresa thaler = nearly 2s. at par.

(2) 1 quintal = 220 lbs.

(3) For further details on this subject see *Atti del Secondo Congresso degli Italiani all'Estero*, and especially 8th session, Theme II, *Dell'allevamento del bestiame in Somalia e del suo trasporto in Italia*, Dr. Ferdinando Martoglio, Vol. I, Part III, pages 1715-1753.

A. Determination of the Lands at the State's Free Disposal.

All the provisions aimed at the determination of the lands at the State's free disposal in Somaliland are comprised in the royal decree of 8 June 1911, no. 695 (1) and the governor's decree of 19 January 1912, no. 815 (2) — of which the former recognizes common rights in the lands of the colony and the consequent limitation of those which may be reserved to the available domain, and is completed by the latter which approves internal regulation of this domain.

The royal decree places the land system on solid jurisdictional bases. It contains two affirmations of incontestable practical value — one as to the State's right of sovereignty over the vacant lands of the colony, the other as to the rights of natives and others incident on such lands. These rights, as is easily understood, are entangled and complete each other, so that the better the local governor, to whom authority to distinguish among them is delegated, succeeds in discharging his office with the foresight and caution needed by the delicacy of the situation, the greater will be the attractiveness of the offers of Somalese land. The land should by his care be emancipated from the latent causes of friction between Europeans and natives which impede the agricultural development of many colonies, reducing them to sterile battlefields for contests. This decree also enables the governor to grant to the native population the use of such land as appears necessary to their progress, in addition to the land they enjoy because they have in it a recognized right of possession.

According to the domestic regulations for the determination of the available domain in Italian Somaliland, approved by the Governor's decree of 19 January 1912, no. 815, those lands are excluded from the colony's domain on which Italian citizens or foreigners have valid and recognized rights, and in general all lands to which attach real rights recognized to be effective in the coastal regions, the inhabited centres and their neighbourhood. Lands "actually cultivated and utilized (3) in a permanent manner", by individual natives or by natives collectively, are likewise excluded; as are the zones, even if they be not actually cultivated and utilized, of which the usufruct is about to be granted to Kabylies or fractions of these, to supply the recognized needs of their demographic and economic development. Such lands constitute the zones of native reserves.

The measures taken in consequence of these rules have the following aims:

- a) to ascertain the limits of the available domain as distinguished

(1) 8 June 1911, no. 695, having reference to the definition of the lands at the State's free disposal in Italian Somaliland. *Gazzetta ufficiale del Regno*, 17 June 1911, no. 166; *Bullettino ufficiale della Somalia italiana*, 31 January 1912, no. 1.

(2) 19 January 1912, no. 815. It approves the rules for the determination of the available domain in Italian Somaliland. *Bullettino ufficiale della Somalia italiana*, 31 January 1912, no. 1.

(3) The assignment of lands recognized to be utilized is called *accantonamento delle utilizzazioni* (reservation of utilized lands).

from the lands in which natives have collective rights, or individual rights independent of common property ;

b) to reserve to populations their rights and usufruct within determined limits and within areas acknowledged to be sufficient for their effective development, and to incorporate zones outside the limits of possible utilization in the domain ;

c) to exclude from the resultant available domain, thus constituted, zones of which it is considered right to leave the usufruct to the Kabylies for their future needs, and to make of these zones native reserves ;

d) to cause migrations, or other measures which prove to be necessary, either to prevent the subdivision of agricultural zones, or to avoid excessive agglomerations of groups of population, or to facilitate the constitution of native villages.

The same rules include under four headings provision for the procedure which will enable such concentration, namely a) Procedure for the recognition of existing cultivations ; b) Procedure for the recognition and the setting on one side or reservation of utilized land ; c) Procedure for the constitution of zones reserved to natives ; d) Procedure to cause migration.

B. *The Agricultural Concessions.*

We will now speak of the realization of the value of the lands belonging to the domain, that is to say of the agricultural concessions of Italian Somaliland.

The conception which inspired the governor of Somaliland, when he submitted the rules as to land (1) to the approval of the competent bodies, was that of defining the powers which according to clause d of article 4 of the law of 5 April 1908 the central government could, in virtue of article 5 of the same law, delegate to him, and of determining their agricultural and industrial aim. The rules establish two categories of concessions which derive their essential characteristics from the authority from which they emanate.

Concessions of the first category are those of more than 2,000 hectares of land, and being dependent on the central government are made by royal decree ; while those of the second category may not be of more than 2,000 hectares and are made by the governor. Both without distinction may be made either to capitalist societies or to private persons of Italian or foreign nationality. The rules rest solidly on principles of incontestable practical value : the applicant for a concession must prove before he receives it that he possesses at least 500 liras for each hectare he has to bring under cultivation ; the conceded land must be granted gradually, in three periods, the area granted being extended progressively ; a concession must be reduced

(1) *Rules for realizing the value of land in Italian Somaliland.* — Royal decree of 8 June 1911, no. 820, establishing the regime of agricultural concessions in Italian Somaliland (*Gazzetta ufficiale del Regno* 16 August 1911, no. 191. *Bullettino ufficiale della Somalia italiana* 31 August 1911, no. 9).

to the limits of the cultivated area whenever, at the termination of one of these periods, the grantee is found not to have fulfilled the obligations imposed by his contract ; and finally grantees whose land borders on rivers or canals, constructed or to be constructed, must receive such land so disposed that the greatest possible number will enjoy the use of the water for agricultural and industrial purposes.

These informing principles have been translated into provisions which, while they do not alter them integrally, arrange for their application within clearly fixed limits, and under the direction of the governor's wise discernment helped by a technical commission nominated for such end.

As regards the term for which they are valid (ninety-nine years) and in other respects the contracts of concession have the character proper to temporary leases.

The rent is fixed by the contract and remains unchanged for thirty years, after which an exemption for five years from rent or taxes is granted, and this exemption may be continued for ten years if the concessionary permanently employ at least one family of Italian cultivators for every hundred hectares he holds. The tax will be fixed in accordance with the profits the concession derives from public works of hydraulics, roadmaking etc., which may increase the value of its land. Similarly the criteria are established which the government can apply in order to recover unpaid rent and taxes, and the contract fee is fixed at one lira (1). Machines and implements used on the concession are exempt from customs duties. The State's right of property is affirmed in minerals below the soil, watercourses and canals. The rules for taking possession of granted land are fixed, as is the due payable in the case of reserves of the administration — in discharge of rights which native populations may have in the conceded land, if it has been impossible previously to establish and recognize these rights. The alienation of concessions is forbidden while they have not been granted definitely, that is to say before their value has been fully developed. This prohibition is intended obviously to guard against speculation in land not yet developed by technical ability and a wise investment of capital. On the other hand lots on a concession may be let or granted to *métayers* with the governor's permission. The transmission of concessions by inheritance is organized as in Erythrea. Since it is not only Italians who may receive concessions the provision is opportune which establishes that questions and disputes to which concessions may give rise, whatever the scope of the disputes and whatever the nationality of the contracting societies or individuals, shall be within the competence of the Italian tribunals.

Applications for concessions of the second category are examined in Somaliland, in the case of resident applicants, by the Minister of the Colonies if the applicant persons or societies be domiciled outside the colony. Three tenths of the capital required to be invested in the concession must be paid when the contract is signed into one of the State treasuries. This sum will be gradually returned to the concessionary as he proves that he

• (1) lira = $9\frac{3}{8}$ d. at par.

is regularly developing the value of his concession. One tenth of the required capital will however be retained by the administration if, at the end of the first year, all a concessionary's rights in his concession lapse entirely because he has not begun to work it, using appropriate methods.

The rules as to land also make mention of concessions of another type, namely of land on which wild crops are exploited and harvested and pasturage used. These are regulated like the other concessions, except that their term is ten years and that they are renewable for the same period ; but on certain fixed conditions land thus conceded by the administration remains at its disposal for eventual concession for agricultural purposes.

Finally the rules establish (article 37) that the governor may dispose of a lot of 5,000 hectares in the form of experimental concessions of parcels, measuring 25 hectares each but capable of being extended to 100 hectares, to small proprietors having suitable capital individually, and united in a compulsory agricultural union for the execution and maintenance of works of hydraulics, benefaction and roadmaking, useful to all the concessionaries, and for the common purchase of machines, seeds and other like articles, under the superintendence of a central technical management. Although only general criteria have been laid down for this interesting scheme, we are persuaded that it would be an enterprise of modern State colonization which would anticipate coming conditions and be very important to the colony's future. We will return to this question when we treat of the experiments in colonization made with Italian families (vide § 5 of this article).

The rules which we have reviewed conform to an excellent principle of administrative autonomy. The precautions by which the administration has sought to guarantee the financial fitness of applicants for concessions, and the regular development of the value of the land, seem to be much more dependable under these rules than they were in the previous contracts by which concessions have hitherto been conditioned. It will be possible therefore to attract into the sphere of agricultural initiative the most active elements and to exclude from it the least desirable. Certainly these rules cannot be called perfect, but on the whole a far-seeing land policy has inspired them. In any case they must be looked upon as the first notable exemplification of the land system of Somaliland. After some ten years of experience it will be possible to make deductions from them and to compare them with the enactments of other colonial laws better than today. It will then be possible to judge whether they need modification, whether other principles should be applied to them in order to reach a more complete organization of the land, and what such principles should be.

§ 4. EXPERIMENT AND EXPERIENCE IN COLONIZATION.

We will now speak of some concessions and the results obtained from them. We will of course only deal with some typical cases, for we lack the space in which to examine all the experiments and attempts made in Somaliland to provoke and to extend colonization.

First we will speak of the concessions in Goscia, made at the outset, on a method which was little empirical, when the idea of attracting Italian capital to these regions necessarily prevailed, no preliminary investigations having been made. Moreover the capital at first sought was evidently ill fitted to the development of an area of 5,000 hectares. And since local conditions had been little studied concessions were not rationally mapped out, the fact being forgotten that wooded and non-irrigable lands sometimes made more than two thirds of a concession non-productive.

It would have been better to grant 1,000 or at most 1,500 hectares of land in conditions which would have allowed of their whole and equal cultivation, without the enormous differences between one concession and another stated to exist to-day. Not only would it have been easier to find the capital necessary to these cultivable lands, but apportionment of the lands most easily cultivated would have allowed the capital, when once the first trial had been made, to have been used for a harder matter, the development namely of the lands of which the cultivation is laborious and costly.

It was impossible that the first concessions should not suffer by this primary defect in preparatory measures. They suffered not only from lack of capital but even more from a lack of the technical knowledge indispensable to such industrial crops as cotton. Such a history is common to the beginnings of all colonies. Several enterprises thus failed, in spite of all the ardour and the energy with which the pioneer colonists of Somaliland endeavoured to establish themselves.

Two concessions in particular, each of 5,000 hectares, deserve a special examination and may be said to have survived and to have preserved some elements of a serious success. They are the *Società italiana per imprese coloniali* and the *Società romana di colonizzazione in Somalia*. The former was formed by a group of Neapolitan and Milanese capitalists. When an earlier enterprise went into liquidation it added excellent water-works to its assets, and brought the vast plain of Bieja near Jumbo under cultivation. Its works of captation and canalization are perfect and no doubt as to the results they will yield can be entertained. In 1911 the cotton produced was sold in Italy at the following prices which are hardly equalled by the best Egyptian cotton :

	Sakellaridis	Selected Abassi	Mixed	Affi	Abassi
Liras	214	228	168	192	194

As much as 155 liras a quintal was offered for Upland cotton.

In 1912 thirty hectares were sown afresh ; and the plants of the previous year had regerminated over fifty hectares and promised an abundant harvest, no trace of parasites having been discovered.

Other hundred hectares, brought under cultivation and canalized in 1912, were sown in 1913.

Since the necessary capital is not lacking this concession will certainly be profitable for a long period.

The *Società romana di colonizzazione in Somalia* really began its work only in the spring of 1911. Since it is directed by Count de Frankenstein, who has made all preliminary studies and preparations, it has a future rich in promise in its splendid concession of Margherita, for it disposes of large capital and has not therefore been stinted in the initial expense necessary to the purchase of machines. Making use of the waters which the Juba at times of spate sends to the old canal called Uebi Gofca, which forms an important reservoir, this society has installed centrifugal pumps worked by a steam motor engine of 45 horse-power, capable of lifting 26 cubic metres (1) of water a second. This water is distributed in the canals which intersect an area of 100 hectares, very well brought under cultivation by a plough worked by an exploding Holt-Caterpillar engine of 45 horse-power which answers admirably. It was possible in that year to obtain a yield of 400 quintals of shelled cotton. The cotton harvest — the larger part of the total production — had hitherto been excellent in quality and there had been no discovery of parasitic germs to deplore. In 1913 the society installed machines anew for the purpose of hoisting the river water directly, and added 150 hectares to the cultivated area which thus came to measure from 250 to 300 hectares. It also acquired a shelling machine able to shell 5,000 quintals of cotton.

In March and April 1916 this society was growing cotton and maize in partnership with the natives over about 250 hectares. It undertakes the first bringing of the land under cultivation, provides water for irrigation, and engages to buy the quota of the crops reserved to its partners at the prices current at the time of the harvest. A considerable number of natives have actively begun works of sowing. This gives rise to a hope that the new system of agricultural organization may meet with a fortunate success and that the difficulties inherent in the labour supply may thus be diminished, while the native labourers will be induced to be more interested in agriculture. The experiment of agriculture of this description goes excellently, and the natives as partners in cultivation are most diligent.

The *Società italiana per imprese coloniali* (Italian Society for Colonial Enterprise) conceived the idea of putting into practice on its concession of Bieja a system of co-partnership different from that followed by the Roman society. It supplies the land, the cotton seed and the water for irrigation, while the natives prepare the soil and undertake all the work of cultivation. Cotton, corn and sesamum are sown in the furrows alternatively. The society will harvest and will own the cotton, while the corn and sesamum will constitute the share of the natives. Cotton, corn and sesamum are thus grown on a number of hectares.

On his concession of Margherita Count de Frankenstein started with the idea that from 200 to 250 hectares must be planted with cotton before capital amounting to 500,000 liras, invested in the soil, can give a profit. In the opinion of competent persons only capital of such importance, employed on installation and machinery, allows — if fit methods be followed —

(1) 1 cubic metre = 1.308 cubic yards.

of progressive and sure development and profits far larger than those possible in Italy. In Goscia large and very fertile tracts are still available above Margherita, extending to Bidi. They include thousands of very fertile hectares, easily irrigable since they lie on plains, not overgrown with bushes, largely above the level reached by the waters of the river when it is in spate and sloping towards the interior.

On one tract in particular, which lies at a short distance from Margherita along the Juba and is surrounded by the Fungalanga Canal, and in which are scattered little native villages, a society could undertake cultivation in partnership with the natives. As in the case of the experiment made at Bidi such society would give cotton to be cultivated, on the security of the average yield which the native themselves would obtain by growing maize. The natives would supply without much difficulty, in view of the density of the population, the labour needed by the society's crops, in return for fixed wage or a share of profits. At times when the river was in spate this tract could easily be inundated: for this purpose the afflux and reflux of the waters would be regulated, and the machines needed to hoist the waters would be used only to constitute a reservoir for cases of necessity. The soil, which is saturated with damp, as black as coal and very fertile, would need only to be reclaimed and sown. A concession of two or three thousand hectares, enjoying the most favourable natural conditions, could be made in this zone.

Turning to the land along the Scheli we find that two concessions have been granted there, one at Havai, and the other at Caitoi where the concessionary, Riccardi, intends to grow chiefly trees. His start was most promising, owing to his admirable enthusiasm which brought about that in a few months he had installed very powerful wind engines, made roads, dug canals, etc. From quite recent data (spring 1916) it appears that in the Riccardi concession at Caitoi new cocoanut and kapok plantations have been made, and that two thirds of the land have been organized by means of permanent works of canalization and the planting of crops now in a flourishing state.

§ 5. SCHEMES FOR COLONIZATION IN SOMALILAND BY ITALIAN FAMILIES.

The criteria which now prevail with respect to the colonization of Somaliland by Italian families may be gathered from the schemes drawn up by the colonial authorities or the official bodies in the mother country, and also from studies bearing on this problem. Naturally these criteria are as yet indeterminate and the schemes therefore are also indefinite in form. But they shed a little light on the question, revealing certain of the most obscure points.

First we must see into what financial engagements the government should enter in order to ensure the success of colonization by Italian families. The calculations are based on a cultivated area of 20 hectares, but the domain to be colonized should extend over 30 hectares, in order that

profits may considerably increase when all available land is brought under cultivation.

I. *Costs of Installation on the Property.*

	Liras
	—
1. Dwelling-house	10,000
2. Warehouse	7,000
3. Colonization and arrangement of the land at 250 liras a hectares (10 hectares in 1st year, 10 in 2nd)	5,000
4. Stock (live stock, carts, harrow, plough, yokes, various implements)	2,270
Total . . .	24,270
II. <i>Travelling expenses</i>	1,500
III. <i>Costs of maintenance for one year</i>	3,000

FIRST YEAR.

Cost of bringing 10 hectares under cultivation.

1st. Preparation of ground until seedtime (For this supplementary labour, costing 25 liras a hectare, is thought necessary)	250
2nd. Seeds (15 liras a hectare)	150
3rd. Expenses of cultivation from sowing to com- mercial preparation of the products. Wages estimated at 100 liras a hectare	1,000
4th. Irrigation at 30 liras a hectare	300
5th. Maintenance of canals and works of irriga- tion. Supplementary costs estimated at 10 liras a hectare	100
6th. New leap of live stock (30 per cent. on 720 liras)	216
7th. Depreciation of implements (amortization) (20 per cent on 1,550 liras).	310
8th. Maintenance of buildings (2 per cent. on 17,000 liras)	340
Total . . .	2,666

Receipts.

10 hectares having a gross yield of 500 liras a hectare	5,000
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Balance Sheet of Crops.

Receipts	5,000
Expenditure	2,666
Credit balance . . .	2,334

The advances which the government should make in the first year, excluding the costs properly so called of establishing the domain, are therefore as follows :

a) Travelling expenses	1,500
b) Maintenance for one year . . .	3,000
c) Costs of working the property .	2,666
Total	7,161

SECOND YEAR.

Expenses for 20 hectares under cultivation.

Expenses for 20 hectares under cultivation, calculated according to the data taken for the first year .	4,970
Maintenance for one year	3,000

Receipts.

Gross yield of 20 hectares at 500 liras each	10,000
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Balance sheet of Crops.

Receipts	10,000
Expenses	4,970
Credit Balance	5,030

If the contract were to be cancelled even at the end of the first year there would therefore be a margin almost sufficient to allow of the entire restitution of the initial deposits.

The head of every family should have a current account book of which the credit side would be opened with an initial deposit of 5,000 liras. From this deposit deductions would be made in cash or in kind on account for a special stores which would furnish means of subsistence and the funds necessary for the cultivation of the land. When the year's

books were balanced the returns of the property should be entered as credited, and costs not met in the same year, such as costs of irrigation, of the depreciation of tools and the maintenance of buildings, as debited. Travelling expenses should be entered with costs.

Receipts.

	Liras
1) Initial deposit.	5,000
2) Return of the crops for 1st. year . .	5,000
3) " " " " " 2nd. " . .	10,000
Total . . .	20,000

Expenditure.

1) Travelling expenses ,	1,500
2) Maintenance for two years.	6,000
3) Advances for crops of 1st. year. . . .	2,666
4) " " " " 2nd. " . . .	4,979
Total . . .	15,145

Balance-Sheet.

Receipts.	20,000
Expenditure.	15,145
	4,855

Even if the contract be cancelled at the end of the second year there were will thus be a margin almost sufficient to allow the entire repayment of the initial deposit.

*
* *

We will now see on what system colonists might be allowed occupation. The measures now in force do not contemplate the concession of lands in absolute ownership. The matter is regulated by article 15 of the *Regolamento per la messa in valore delle terre nella Somalia italiana* (Rules for the Development of the Lands of Italian Somaliland) which establishes that concessions may be for a term up to ninety-nine years. In view however of the mentality of the peasants to be affected by the contract it would perhaps be very useful, and would increase the attractiveness of the scheme, to promulgate as soon as possible a royal decree which would enable the governor to sell the domain under conditions fixed by the contract.

The government advanced about 25,000 liras for the first costs of settlement, which sum had become 27,040 liras at the end of the first year by the accumulation of interest. The annual balance sheet of crops gave at the end of the second year, as has been seen, a balance of 5,030 liras, and if 3,000 liras be deducted from this as the costs of subsistence and maintenance a net profit of 2,030 liras remains. Admitting that the initial capital of 27,040 liras at the end of the second year should be amortized in 25 years, the corresponding annual instalment due would be 1,730.56 liras — a sum within the balance quoted.

On this system, and on the basis of the revenue of the holding calculated according to the criteria we have explained, the economic position of the holding would be such as to give the colonist the purchasing power necessary to allow him to become a proprietor. An annual sum of about 300 liras would remain to his credit, and this added to the existing 3,000 liras would bring the family budget up to 3,300 liras.

In order however better to ensure the success of the experiment, and to make it still more attractive, the government might cede to the colonists a third or more of the sum represented by the capital of initial settlement. Thus the sum which the colonist would have to repay in order to become owner of the property could be reduced, for instance, to 18,000 liras or even less, according to the calculations we have shown. With a view to such a measure an offer could be made to the colonist at the end of the experiment, that is to say after three years if the experiment had given good results — of the ownership of the property burdened with an annual due from which he could free it by paying 4 per cent. on 18,000 liras — that is 720 liras. The case which we have reported would still be the basis of this plan.

If it were executed the following cases might present themselves, and they should be considered before an idea of the charges which the government may have to support can be obtained.

a) *1st hypothesis.* — The enterprise entirely fails to reach its end in the first year. The administration is therefore in the position of having advanced about 25,000 liras as costs of installation, and 7,166 liras as travelling expenses, one year's maintenance expenses and the costs of working the property; and yet it does not consider seizing the colonist's initial deposit in order to compensate for such losses. This hypothesis of a catastrophe, which is most improbable, since it is allowable to suppose that the installation would not constitute a complete loss, would entail an expense of 32,166 liras.

b) *2nd hypothesis* — The enterprise fails only after the second or third year. In view of the government's constant superintendence and the annulment clauses in the contract it would be difficult to reach a worse result than that indicated under a).

c) *3rd hypothesis.* — The experiment succeeds so that the holding becomes the property of the colonist or whoever takes his place. This case should be considered in two aspects:

1. The favourable result is due to the special conditions created in the colonist's favour, in that the government may be said to have given him

10,000 liras. This amounts to a failure of the experiment and should lead to an abandonment of the method.

2. The favourable result is due — as regards data and actual fact — to the productive power of the holding, and to a return from the labour of the colonist's family sufficient to allow of their permanent settlement on the holding or to call for another family to replace them. Such is the ideal end of the experiment. If it be attained, even if the specially privileged conditions enjoyed by the first colonists' families be overlooked, the accounts will give an exact idea of the holding's economic strength and of the organization necessary to prosperous colonization in small holdings by a white population. The most favourable hypothesis would presume an expenditure on the experiment by the government of from 10,000 to 12,000 liras, that is to say of the difference between the costs of installation and the sum repaid by the colonist.

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* *

It will now be well to resume a scheme for colonization in Somaliland by the means of small proprietors, drawn up at the request of the government of Somaliland by Professor Bizzozero, director of the peripatetic chair of agriculture of Parma. This scheme is important because article 37 of the *Regolamento per la messa in valore delle terre nella Somalia italiana* refers to it and has largely incorporated it. We have already dealt with article 37 in speaking of the land system in Somaliland (§ 3. B.)

This attempt at colonization should be begun by a limited number of cultivators' families, some twenty at most, who so soon as they reached the colony would in the presence of the governor form a first agricultural union for the colonization of Italian Somaliland. Only the heads of families would sign the union's constitution, each thus becoming responsible for all his family. As soon as the union were formed each of them would pay the amount of at least one share of 50 liras together with a guaranteeing deposit of 5,000 liras. This latter sum would be entered in a current account book which would be delivered to the depositor on the same day. The agricultural union would be superintended and inspected by the colony's government. This government would for the first two years freely supply the seeds of the herbaceous crops to be grown and the plants for lignous plantations. The colony's technical agricultural office would decide what machines were needed on each holding, and the union would deliver them to the cultivators, entering the sum charged for them on the current account books. Each holding would receive from six to ten head of cattle, and eventually one or two camels and twenty-four sheep, the value of the animals being likewise entered in the current account books. For articles of food each family would have a book and the total sum due for purchases made from the union would be debited to them monthly. The financial resources of

the union would be constituted by the amount of subscribed and paid-up shares, and each family's guaranteeing deposit of 5,000 liras. The colony's government might grant subsidies to the union during the first five years. Five per cent. on sums to the credit of the cultivators in their current accounts would be paid to them by way of encouragement and 3 per cent. charged on the sums with which they were debited. Eventually the rate of interest on the debit and credit accounts would be the same.

All products of the soil would be delivered to the union which would have the necessary warehouses and the other accommodation in which they could be prepared for commercial or industrial use. They would be utilized in their entirety, by the sale of primary and secondary products in their natural state, or by the submission to essication or other processes of products (vegetables, fruit, etc.) which could not travel or be kept for any length of time. The quantities delivered would be entered in the current account books, at prices fixed by the administrative council in agreement with the director, a supplementary quota of any larger price yielded by sale being added when necessary.

Thus the agricultural union would discharge to some extent several roles. It would supply first a commercial agency for the purchase and the distribution to members of live stock, agricultural machines, seeds, plants and other agricultural requisites; secondly a bank for receiving guarantee and savings deposits and making agricultural advances, like the Italian agricultural banks; thirdly a warehouse for everything needed to feed and clothe the cultivators' families; and fourthly an industrial co-operative producers' society for the commercial conversion or preparation of the products of the soil.

This union would last for ten years, and would then be renewed in a form modified as experience would dictate.

The by-laws of the union should be adapted to local conditions and the laws in force in the colony. The scheme has some further provisions as to the purchase and letting of cultivated land after the first five years of cultivation. But this part of the scheme seems to us to have been superseded since article 15 of the rules for developing the lands in Italian Somaliland established that concessions would be made for a term of ninety-nine years.

The financial part of the scheme presupposes an expenditure on installation of half a million liras, and one of 42,000 liras a year on the working which might after five years be reduced to 32,000 liras.

* * *

There is no doubt that a prosperous future awaits Italian Somaliland we have seen what elements of wealth the colony contains, what new factors of production and of wealth might be cultivated or called forth

within it, and all the economic and administrative measures taken to develop these treasures.

But that which we said with reference to Erythrea as to the importance of the human element applies also to Somaliland. The politics of the native population, misunderstood and neglected in the early period of the Italian occupation of Erythrea, intimately affect the relations between the mother country and the nations on which her civilizing role is exercised and are largely responsible for the result and success of the economic and administrative measures proposed for the development of colonial enterprises.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL.

BELGIUM.

AGRICULTURAL TRAINING FOR PARTIALLY DISABLED SOLDIERS. — Communicated by M. H. de Lappaient to the *Académie d'agriculture en France*, at the session of 13 December 1916.

In organizing technical training for the seriously wounded the Belgian government has acted on the principle that an injured man should, whenever possible, not run the risk of becoming a dead weight on the resources of his country, but should still be an appraisable asset, even — in some cases — an element of prosperity. It has therefore been decided to compel the partially disabled to undergo a technical training, suited to the nature of their injuries, the trade they have previously followed, and the tastes and aptitudes which may be discovered in them.

In August 1915 the work of installing the Belgian Military Institute for the Technical Training of the Seriously Wounded on the land of Notre-Dame-de-la-Mère, seven kilometres (1) from Vernon (Eure), was begun.

Huts which can be taken to pieces and are of uniform pattern are distributed in three rows separated by well metalled roads. They cover an area of 17,000 square metres (2) and accommodate more than 1200 men, including the permanent staff of the school. The number accommodated will be raised to 2,000.

The work necessitates a variety of plant and of labour : for the roads which have to be made a quarry has been opened, and its stone is transported by a Decauville way ; land containing too much clay has had to be rendered sanitary ; a system of electricity, seventy kilometres long, has been established to give light to 1,400 lamps and to feed thirty motor-engines in the various workshops, furnishing altogether 158 horse-power.

The site of the Institute, in the centre of a forest of 350 hectares (3), made it possible to make a bargain with the owner for the purchase of the

(1) 1 kilometre = 1093.633 yards.

(2) 1 square metre = 10.764 square feet.

(3) 1 hectare = 2.47 acres.

underwood, in the interests of heating, as well as most of the forest trees. There has ensued real forestry enterprise with the accompanying industry and machinery, and considerable quantities of stakes have been secured.

Forty-eight different trades are taught, each by a practical workman and demonstrators. In addition to the practical work two hours a day are devoted to courses and technical explanations, given by specialists who, like the overseers, are themselves soldiers, oftenest unfit for service by reason of wounds or their health.

Among the trades taught which are connected with agriculture are cart-er's work, smith's work, the mending of agricultural machines, harness-making, basket-making, the making of packing-cases.

Some hectares of uncultivated and clayey land have been given up to vegetable growing on a large scale, and it has been necessary to dig, drain and clean these. Heavy manuring and numerous agricultural expedients have produced good returns. A vast kitchen-garden has also been formed, its beds bordered by ready-grown fruit-trees.

Outside the central premises of the Institute, in which only some hectares of land admit of cultivation, a farm of some twenty hectares at a short distance has been rented; and there the scientific succession of crops, which plays so large a part in kitchen-gardening, is practised, and some good meadows allow a certain number of carefully selected milch-cows to be kept.

The average number of wounded men undergoing agricultural or horticultural training is seventy. They are given experience, successively and in order, of all forms of indoor and outdoor work. They are especially trained to prepare and pack vegetables, which are produced largely above the needs of the establishment. At the end of August 1916 the growing vegetables were valued at some 38,000 francs (1).

The training given in keeping regular accounts should be noted; for it is of capital importance to each of the trades taught in the Institute, where the whole industrial enterprise aims at the sale of products, manufactured and other.

Every wounded man receives 0.05 franc per working hour from the time of his arrival, by way of encouragement. Each trade is however divided into an apprenticeship and a productive section, and when a man is fit to pass into the latter his wages increase progressively until they reach or even surpass the level of those of uninjured workmen in the same trade. "These productive sections", says the technical director in his report, "have brought in more than 620,000 francs for manufactured articles.. The importance of keeping accounts can be estimated when it is stated that the turnover for the past year was 950,000 francs".

Finally we note that an agricultural orphanage has just been established, in which orphans of the war will enjoy conditions analogous to those of the partially disabled men, receiving a practical and technical agricultural training.

(1) 1 franc = $9 \frac{3}{5}$ d. at par.

FRANCE.

THE DEPARTMENT FOR CIVIL AND MILITARY VEGETABLE GARDENS.

This department, was recently set up within the Ministry of Agriculture, united to the Ministry of War, and was placed under the direction of R. Maxime Ducroq, president of the enterprise for workmen's gardens at Lille. Its chief object is to provoke and encourage the formation of vast vegetable gardens on the abandoned lands :

1) By means of the depots of army corps and their sections, the sentry-posts of territorials guarding roads and communications, and the hospitals and other military establishments, in which men are retained by their duties and whence they cannot be sent away on leave or for agricultural employment, but where none the less they dispose daily of some hours of leisure ;

2) By means of the civil population of large towns and the neighbourhoods of these.

In 1916, 5,622 military vegetable gardens, having an approximate total area of 2,000 hectares (1) and able to yield about 13 million francs (2) a year were formed by these means.

In order largely to develop this first success, a staff of seventy mobilized men has been instructed at the Ministry of Agriculture and has been commissioned to go through all France, encouraging by lectures, advice and other measures the gardening by depots ; and it is hoped that the existing number of gardens will thus be multiplied by five or even ten in 1917.

Besides vegetable gardens it was recommended that military piggeries should be instituted, in order to utilize greasy water and other waste food. Almost all the depots now keep pigs in this way, and some of them constantly have in their sties about a hundred pigs, the meat of which does not cost them more than 1.25 francs a kilogramme (3).

The civil vegetable-gardens have also acquired a considerable importance. Nine recently formed committees share the task of cultivating the lands attached to the fortifications of Paris in which 3,500 gardens have been established. But the number of applications is much above this figure, and the project was conceived of causing some of the abandoned lands in the neighbourhood of the city to be cultivated by the population of Paris. A meeting of the mayors of the communes of the department of Seine was therefore held at the Ministry of Agriculture on 22 February 1917 and was followed by the formation of several local organizing committees. Already analogous committees have been formed in a certain number of these communes to distribute their uncultivated lands among their in-

(1) 1 hectare = 2.47 acres.

(2) 1 franc = 0 $\frac{3}{8}$ d at par.

(3) 1 kilogramme = 2 $\frac{1}{8}$ lbs.

habitants. One of them has distributed 300 gardens, of 300 square metres (1) each, to as many necessitous families.

The movement is spreading to the large provincial towns. Some of them have resumed on a far larger scale the culture which they undertook in 1916 at the expense of the municipality, and they have without exception obtained the best results.

Further by the despatches of 30 December 1916 and 19 January 1917 the Minister of War decreed that a certain number of mobilized men should in each district be commissioned for three months in the year to provoke and encourage the formation and development of military vegetable gardens.

These mobilized men went through a course at the Ministry of Agriculture which ended on 4 February 1917, and then departed to their districts where most of them at once began work.

Since the despatches mentioned were variously interpreted, in some districts the minister specified their intention as follows :

1) Each of the men concerned, except such as have been noted as unsuitable by the Ministry of Agriculture and therefore replaced, should receive as soon as he reaches his district, from the general commanding it, an order allowing him to go and come freely within its limits. The three months for which he is commissioned start on the day on which this order is remitted to him.

2) From the date on which this order is remitted to him the lecturer is under the orders only of the general or generals to whose subdivisions he has been assigned, is in direct correspondence with them, and addresses his reports to them directly.

3) For the time for which he is commissioned the lecturer must not be expected to render other service.

4) In every place lectures must be delivered to the chiefs of united units and not to each unit separately, and must precede the visits to the various military formations.

5) With a view to these visits a lecturer is supplied without delay with a complete list of the military units, detachments and establishments within the district assigned to him.

In virtue of a decision of the Minister of War on 18 February 1917 the head of the Department of Civil and Military Vegetable Gardens at the Ministry of Agriculture has been entrusted with the local control of the execution of instructions applicable to military vegetable gardens, the verification of results obtained, and the superintendence of the military lecturers commissioned for the relevant work of propaganda.

(1) 1 square metre = 10.764 square feet.

NEW ZEALAND.

SETTLEMENT OF DISCHARGED SOLDIERS ON THE LAND. — *The Journal of the Board of Agriculture*. London, October 1916.

In New Zealand the problem of helping the discharged soldier over the period of transition from military to civil life has been attacked with commendable promptness and thoroughness. At the outset, owing to the novelty of the work and the necessity of improvising the entire machinery, many difficulties had to be faced. The Discharged Soldiers' Information Department, the department of State specially formed to deal with the matter, has however surmounted most of these difficulties and the work is now organized on a satisfactory basis.

According to the first report of the department, which was issued in May, its procedure is, briefly, as follows. The names, addresses and other general particulars as to returning soldiers are collected before the transports reach the landing ports and are registered on cards. The cards are then sorted according to the various districts and a confidential schedule is sent to a local committee. When the soldier is eventually discharged from military service he is interviewed by an officer of the department who reports any particulars which are likely to be of use in finding him employment. With the assistance of the local committee a determined effort is then made to secure employment for those who require it.

The employment of soldiers on the land naturally forms an important part of the work of the department. To meet the case of soldiers who have had no experience in farming, arrangements have been made with the Department of Agriculture to undertake the training of a limited number of men on the various State farms in general farming, dairy farming, fruit farming, poultry and bee keeping, etc. It was thought that partially disabled men in receipt of pensions might reasonably be expected to desire to take up small sections under the land settlement scheme, for the purpose of poultry raising and other light branches of farm work, and that in these cases a course of practical instruction would often save loss of time and money and consequent discouragement. Up to the present time the opportunities afforded have not been taken advantage of, the men — almost without exception — desiring employment of an immediately remunerative character.

State assistance to New Zealand soldiers wishing to settle on the land is however by no means confined to courses of instruction. By an Act passed in October 1915 and entitled the Discharged Soldiers' Settlement Act, 1915, a discharged soldier is given a number of advantages. Under this Act land may be taken up in two ways. Crown or settlement land may be set apart for selection *only* by discharged soldiers, or it may be disposed of to them under special conditions. In either case the Department of Lands is empowered to remit — wholly or in part and for such periods as it thinks fit — any

rent payable by a discharged soldier, or may postpone the date for the payment of the rent. When held under special conditions the soldier may receive financial assistance to enable him to bring his farm into such a state that he can make a living from it.

Land may be disposed of to discharged soldiers either by way of sale or by lease. When sold the price is fixed by the Land Board. If disposed of on terms of deferred payment the purchaser has to pay a deposit of 5 per cent. of the purchase money, the balance being paid in equal annual instalments with interest at 5 per cent. When let the term may be up to sixty-six years with a perpetual right of renewal for further successive terms. The rent will be determined by the board and is not in any case to be more than $4\frac{1}{2}$ per cent. of the capital value of the land. The lessee may at any time during the continuance of the lease acquire the fee simple of the land.

Under section 6 the Minister of Lands may assist an applicant in the clearing, fencing and general improvement of the land, the erection of buildings, and the purchase of implements, stock, seed, trees and any other things which may be deemed necessary for the successful occupation of the land. The rate of interest is to be fixed by the minister, but in cases of hardship he has power to dispense wholly or in part with the payment of interest. The total of the advances made to one person is not to exceed £500. No land let or sold to a discharged soldier under the Act can be transferred until the expiry of ten years from the date of the sale or the beginning of the lease.

According to the first report on the working of the Act 500,000 acres of land have been provisionally set apart for discharged soldiers. Of this area 67,855 acres have formally been proclaimed under the Act. It has been decided to cut up some blocks of land into suitable sections and, before finally settling soldiers on them, to effect such improvements as will enable selectors to make a living off their sections. As far as possible soldiers will be employed in effecting these improvements. For fruit farming it has been decided to plant areas with fruit trees, particularly apples.

RUSSIA.

THE FORESTS OF FINNISH TOWNS. — *Uppsatser i skogsbruk*; Helsingfors, September 1916; *For landmannahem*; Helsingfors, September 1916.

In 1915 the Central Communal Office undertook an enquiry as to forest economy in the towns, sending a detailed form of questions to all the towns of the country. Only Kemi and Mariehamn made no response. The results of this enquiry have been published in a study which forms part of a series showing the special researches of the Finnish Forestry Society, and which is also among the publications of the Central Communal Office.

According to the information supplied by the financial commissions

of the towns, the forests of the different towns had in 1915 the following areas:

Kajana	9521.01 hectares (1)
Torneå	5430.29
Kuopio	3876.42
Uleåborg	3485.57
Gamlakarleby	3149.48
Lovisa	2670.82
Raumo	2502.57
Heinola	2418.68
Kristinestad	2303.00
Ekenäs	1847.38
Nykarleby	1638.60
Helsingfors	1536.00
Joensuu	1513.70
Viborg	1507.98
Nyslott	1450.00
Hangö	1189.04
Vasa	1183.59
Brahestad	1044.50
Jakobstad	980.48
Kexholm	865.45
Tammerfors	845.46
Nystad	833.92
Tavastehus	808.75
Idensalmi	736.38
Borgå	719.33
Kaskö	682.21
Lahtis	678.77
Jyväskylä	653.26
Björneborg	642.82
St. Michel	598.35
Fredrikshamn	586.00
Abo	575.22
Willmanstrand	574.17
Sordavala	367.40
Kotka	353.60
Nådendal	170.46

The total area of the communal forests is thus about 60,000 hectares.

The forest law of 1886 compelled the towns to draw up rules of forest economy for the forests on their donation lands (2) and to derive profit from

(1) 1 heciare = 2.47 acres.

(2) Landed property granted to the towns by the State.

them in accordance with these rules. If the area of the woodland be one hundred hectares or more the Forest Administration must advise concerning the projected rules before the municipal council accepts them. Some towns however have still no rules of forest economy.

The following notes shows the importance of the Finnish communal forests to the economy of urban communes.

The towns of Kjana, Torneå, Kuopio, Gamlakarleby, Kristinestad, Ekenäs, Lovisa, Heinola, Nykarleby, Hangö, Kexholm, St. Michel and Nädendal can take from their own forests only all the wood they need for building but they may not sell wood. The towns of Raumo, Brahestad, Jakobstad and Idensalmi take from their own forests all the carpentering wood they need but do not sell any wood. The towns of Uleåborg, Nyslott, Nystad, Tavastehus, Borgå, Kaskö, Jyväskylä and Willmanstrand have sold building wood but have on the other hand made several purchases of wood to meet their own needs. The towns of Joensuu, Vasa, Lahtis, Björneborg and Fredrikshamn have not been able to sell any wood but have been obliged, on the contrary, to buy it. Finally four towns — Kotka, Abo, Sordavala and Mariehamn, have derived no economic profit from their forests.

If we classify the towns according to the net income they obtain from their forests they should be placed in the following order :

The first is the town of Jyväskylä which in the quinquennial period 1910-1914 derived from its forests an average net income of 34.73 francs (1) a hectare. The second is the town of Kuopio, if we include in the net income the value of the wood with which the town has met its own needs. The year 1914 then yielded a net income of 30.63 francs a hectare, sales alone giving an average net income in this year of 14.63 francs a hectare. Gamlakarleby should probably be placed third, and Borgå, with its average of 23.42 francs, fourth. There follow Kristinestad — 22.18 francs; St. Michel — 19.11 francs; Lovisa 17.81 francs (2); Kaskö 15.32 francs; Nädendal — 13.74 francs; Nyslott — 8.79 francs; Kexholm — 6.14 francs (2); Ekenäs — 5.64 francs; Uleåborg — 5.49 francs (2); Hangö — 3.04 francs; Vasa — 2.44 francs; Raumo — 2.26 francs (3); Lahtis — 2.17 francs (3); Tavastehus — 2.21 francs; Torneå — 2.09 francs; Kajana — 1.99 francs (2); Joensuu 1.74 francs (3); Nykarleby 1.59 francs; Viborg — 1.22 francs and Björneborg — 1.09 francs. The town of Helsingfors suffered a loss of 3 centimes a hectare and that of Fredrikshamn one of 53 centimes a hectare.

(1) 1 franc = 9 $\frac{3}{5}$ d. at par.

(2) Income from sales.

(3) In 1914.

* * *

THE POSITION AND THE ACTIVITY OF THE GRAIN ELEVATORS OF THE GOVERNMENT AND THE RAILWAY COMPANIES.

SOURCES :

1) А. Дорошенко: "Элеваторное дѣло въ Россіи въ 1915 году," (A. Doroschenko: "The Work of the Elevators in Russia in 1915") in ВѢСТНИКЪ ФИНАНСОВЪ, Промышленности и Торговли (Messenger of Finances, Industry and Commerce) Nos. 31, 32 — 31 July, 13 August and 7/20 August 1916.

2) Торгово-Промышленная Газета (Gazette of Commerce and Industry) Nos. 201, 203 — 17/27 and 17/30 August 1916.

If the two great agrarian reforms, that of 1861 and that of 1905, had effect, apart from their social and political influences, on factors which bore on agricultural production, the establishment of grain elevators was destined to be among the most important influences which enhanced the commercial value and the profitableness of the harvest yields when once they had been obtained. Production and markets had to be brought nearer together, the middlemen eliminated if possible, and grain of better quality and in a purer state more evenly brought into trade. These ideals were conceived in Russia as early as the fortieth year of last century (1), but it was only in its eightieth year, after the advent of overseas competition, that the idea of covering the Russian State with a system of elevators really gained ground.

Railway companies and private persons then undertook the erection of grain elevators. The first of them date from 1891 and were four in number, situated in Rjashsk (Government of Rjasan) and Koslov (Government of Tambov), the warehousing capacity in both these places being of 300,000 puds (2), and in Dankov and Lebedjan (Government of Tambov), in both of which the warehousing capacity was of 200,000 puds. In 1897 seven elevators were at work and in 1902 twenty-seven. Before March 1897, the date at which the erection of elevators by the means of the State Bank began, sixty-one elevators of the railway companies and of private individuals existed and their total warehousing capacity was of 23,524,000 puds. In addition there was an elevator of the zemstvo administration of Jeletz (Government of Orel) which could store 672,000 puds of grain.

The largest of these elevators, eight in number, were erected in the harbours, namely :

(1) See "Loans granted by the State Bank on Security of Grain and the Establishment of Grain Elevators in Russia," *Monthly Bulletin of Economic and Social Intelligence*, March 1914, page 85.

(2) 1 pud = 40 lbs.

In Petrograd	2	elevators	having a storage capacity of	3,200,000	puds
" Revel	1	"	"	250,000	"
" Vindava	1	"	"	2,362,000	"
" Riga	1	"	"	750,000	"
" Novorossijsk	1	"	"	3,000,000	"
" Nikolaev	1	"	"	1,750,000	"
" Odessa	1	"	"	1,000,000	"
Total	8			12,312,000	"

The storage capacity of the fifty-four elevators which were situated in the interior was of 11,884,000 puds. Individual elevators among these differ very much as to the amount of grain they can receive : it varies from 150,000 or 200,000 puds to 1,000,000 puds — the estimate being for rye — in Moscow.

Judged by the number of times their contents change hands during a trading season the biggest elevators attain the best results : thus in Moscow this was effected 1.74 times, in Koslov (the nearest elevators being included in the calculation) 1.81 times. Two other elevators in fertile districts which chiefly serve purposes of loading also work very well. All the others, that is the smaller elevators, have difficulty in obtaining a like success, as appears in their financial results. Only the elevators in Moscow and Koslov have attained to a profit. All others on the Rjasan-Ural line brought a loss to their companies.

Year	Receipt	Expenditure	Profit	Loss
1912	225,041 roubles (1)	199,215 roubles	25,826 roubles	— roubles
1913	163,157 "	204,077 "	— "	40,920 "
1914	218,483 "	247,042 "	— "	28,559 "

That the railway companies met with so little success in their erection of elevators is partly due to the fact that these for the most part were built on sites chosen with little regard to their activities, and were connected neither with the banks or the exchanges, and that each of them worked for itself alone, in isolation, the companies following only their own special and individual aims without seeking to influence the total trade in grain. The employment of the elevators by the population was therefore in no sense extensive. In 1897, 11,107,000 puds of grain were brought to the elevators of the Rjasan-Ural line, which had a storage capacity of 6,350,000 puds; ten years later, in 1907, 10,452,000 puds were brought to

(1) 1 rouble = about 2s 1½d at par.

them. Thus not only was there no improvement: there was retrogression. Even the amount of 1907 has not been reached of late years.

Year	Grain brought to the Elevators
1912	5,807,800 puds
1913	6,440,300 "
1914	8,446,500 "

These figures shows indeed some progress, but 11,107,000 puds, the amount of 1897, has not since been equalled.

To make the elevators more effective for purposes of trade, and to heighten their activities as regarded both quantity and quality of grain, the government decided to establish its own system of elevators by means of the State Bank. Hence arose:

in 1912	3	elevators	having a storage capacity of.	. . .	2,500,000	puds
" 1913	6	"	"	"	. . .	5,700,000 "
" 1914	9	"	"	"	. . .	5,050,000 "
" 1915	12	"	"	"	. . .	7,500,000 "

In addition in these same years the State Bank acquired three elevators having a storage capacity of 850,000 puds from the Rjasan-Ural Railway Company, and in the beginning of 1916 one elevator having a storage capacity of 1,000,000 puds (Moscow). In the beginning of April 1916 the State Bank erected an elevator able to receive 600,000 puds. Thus altogether there arose thirty-five elevators having a total storage capacity of 23,200,000 puds. In addition thirty-four were being built and were more or less completed. It was decided on 17 June 1916 to erect for the grain districts of the north east and the south west and for the black earth district seventy-seven elevators and granaries able to receive 62,750,000 puds. Through the medium of the State Bank it has also been planned to cover Siberia with a system of elevators, placing in Novo-Nikolajevik (Government of Tomsk,) where the trade in grain is very great, an elevator to hold 2,000,000 puds, and at the station of Kulomsino, at the junction of the Omsk-Jekaterinburg and Tcheljabinsk-Irkutsk railways, one to hold 1,500,000 puds and more.

The existing granaries in Siberia numbered seventy-seven in the middle of July 1915 — they are said since to have increased —, had a storage capacity of 6,704,000 puds, and were subject to the Colonization Administration.

The activities of the elevators of the State Bank cannot be measured by their financial results, as can those of a private company, for they are proportionate not to profits but to the efforts made to organize the home trade in grain on a regular plan and to direct it to right paths. Financial points of view should be disregarded especially at the present time, in which all elevators have been placed under military direction. Nevertheless in

1915 several elevators attained to very favourable balance-sheets, as appears from the following figures.

Elevators	Storage capacity	Profits (Commission not deducted)	Zemstvo Commission	Net Profits
—	—	—	—	—
Gryasi (Gov. of Tambov) .	1,700,000 Puds	71,853 Roubles	30,559 Roubles	41,294 Roubles
Tolkaj (" " Voronesh). .	300,000 "	7,868 "	6,561 "	1,307 "
Liski (" " ").	500,000 "	— "	— "	3,051 "
Neprik (" " Samara) .	300,000 "	4,186 "	2,431 "	1,755 "
Millerovo (District of the Danube).	600,000 "	— "	— "	11,049 "
Bogatoe (Gov. of Samara) .	300,000 "	13,059 "	2,433 "	10,626 "
Sorotskinskaja (Gov. of Sa- mara)	700,000 "	18,991 "	4,862 "	14,129 "

The elevators are developing a very valuable activity in the service of the military authorities. In the region of Tambov, for example, where the State Bank possesses four elevators, 17 per cent. of all bought grain passed through these from 1 January until 1 July 1915, and 28 per cent. from 1 July 1915 to 1 January 1916. In the south-eastern region 38 per cent. of all bought grain was brought to the elevators from 1 July 1915 to 1 June 1916 and 45 per cent. of oats and barley.

Grain when received in the elevators is very carefully dried, cleaned several times over, and carefully sorted. Drying machines have been installed for twenty-four elevators. The building of the elevator in Nabreshnije Tshelni, now nearly completed, will enable the total number of drying machines to deal with 3,000 puds an hour.

As regards the number of times the contents of the elevators change hands in a season this is effected four or even five times in the case of the large erections near railway junctions, and from one and a half times to twice in that of the small local elevators. In order to co-ordinate the activities of elevators and more and more itself to control them, the State Bank will erect them in future only on a large scale. The smaller and local granaries in the rural districts will continue to be decentralized and will be conducted by the zemstvo administrations and the co-operative societies.

Thus the countryman, by the medium of his co-operative society or the zemstvo, can convey his grain to the State Bank's elevator which makes the direct connection with the world's markets.

All that has been said makes clear that we have here a means of giving a firm basis to the Russian trade in grain and a promise of a continually improving output of Russian grain on foreign markets.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXVI.
8TH. YEAR: NUMBER 4
APRIL, 1917.



ROME
PRINTING OFFICE OF THE INSTITUTE
1917

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Part I: Co-operation and Association

BRITISH INDIA.

PROGRESS OF AGRICULTURAL CO-OPERATION IN 1914-1915.

SOURCE:

THE MADRAS BULLETIN OF CO-OPERATION, Vol. VII, No. 2, Madras, December 1915.

§ I. BENGAL.

The general progress of co-operative societies in Bengal may be gathered from the following statement:

Class of Societies	No. of Societies		No. of Members		Working Capital	
	1913-1914	1914-1915	1913-1914	1914-1915	1913-1914	1914-1915
					Rs. (r)	Rs.
Central Societies . .	40	46	4,729	5,061	32,53,550	40,93,136
Agricultural societies	1,543	1,862	71,282	85,717	44,11,493	52,95,099
Non-agricultural societies	78	84	14,317	16,340	12,74,222	16,13,382
Total . . .	1,661	1,992	90,328	107,118	89,38,265	110,91,617

(1) 1 rupee = 1s. 4d.

Central Societies. — At the end of the year 1914-1915 there were thirty-eight central banks and eight supervising unions in Bengal. The share capital of the central banks had increased from Rs. 383,555 to Rs. 4,89,548 and their reserve fund from Rs. 35,658 to Rs. 75,072. The combined

share capital plus the reserve fund formed 13 per cent. of the total liabilities. The banks had taken up the supervision and control of the affiliated societies, granting loans to societies at rates ranging from 9 $\frac{3}{4}$ to 10 $\frac{1}{16}$ per cent.

Agricultural Societies. — 1,582 out of 1,862 agricultural societies were affiliated to central banks at the end of 1914-1915. The share capital of the societies had decreased from Rs. 57,564 to Rs. 50,482, but their number, membership and capital had all risen by 20 per cent. The average membership of a society was 46.03 as in the previous year and the average capital Rs. 2,843.76. The average capital per member was Rs. 61.77. Grain banks and stores were working less successfully than previously. The Decca Co-operative Dairy was working satisfactorily and had realized a net profit on the supply of milk of Rs. 414-9-9 in the year. A society had been started in Mymensingh for supplying bonemeal and potato seed through the agency of societies in that locality. Another supply society had been organized at Khelar to deal in ghee, mustard oil, dhutis and chadars.

Audit and Inspection. — Auditing and inspecting are done by the Registrar and his staff. The staff working under the control of central banks and local organizers but paid by the government numbered twenty-four at the end of 1914-1915. The central banks maintained a staff for the supervision of societies affiliated to them.

§ 2. BURMA.

The following table shows the general progress of Burmese co-operative societies in 1913-1914 and 1914-1915.

Class of Societies	No. of Societies		No. of Members		Working Capital	
	1913-1914	1914-1915	1913-1914	1914-1915	1913-1914	1914-1915
					Rs.	Rs.
Central societies . .	96	117	2,748	3,162	26,57,113	34,34,133
Agricultural societies	1,214	1,329	29,889	32,375	32,65,893	41,62,560
Non-agricultural societies	49	43	3,414	3,574	6,14,107	9,03,119
Total . . .	1,359	1,489	36,051	39,111	65,37,113	81,99,812

Central Societies. — There were in Burma at the end of 1914-1915 one provincial bank — the Upper Burma Central Bank — three district central banks and 112 guaranteeing unions. Affiliated societies had a majority of shares and a yet more pronounced majority of votes in the provincial bank. This bank paid 6 $\frac{3}{4}$ per cent. interest on deposits received

and lent at 9 per cent. to societies, which in turn lent to their members at 15 per cent., thus leaving a broad margin. The district central banks were dependent to a large extent on the provincial bank, which supported them with cash credit from time to time. Unions had increased from ninety-two to 112, partly because six large unions had split into two, three or even four. The unions comprised 1,117 out of a total of 1,252 societies.

Agricultural Societies. — Of the 1,252 societies 606 were of the Luzzatti and 646 of the Raiffeisen type. Their total share capital was 7 lacs (1) and their reserve funds amounted to about 6 ½ lacs. These two items were respectively equivalent to 45 per cent. and 33 per cent. of the societies' total liabilities. The model by-laws were being amended in order that the general meeting might fix the maximum borrowing power of a society and the maximum normal credit it could grant to a member. The average membership of a society was twenty-seven and the average loan per member Rs 136. On three tracts of land co-operation went hand in hand with colonization, namely the Mon Canal Tract, the Mohyni Valley and the Kadonbaw Tract. The main features of the colonizing scheme were that an area was let to co-operative societies formed of cultivators migrating to it, and not granted or let to individuals, and that such societies were based on co-partnership tenancy and had no capital, but borrowed money from government as an agricultural advance. Cattle insurance societies had increased by four and sale societies decreased by forty-nine.

Audit and Inspection. — There was a proposal to separate administrative from auditing work in order to prevent the overlapping of responsibility, appointing an auditor on a salary of from Rs. 70 to Rs. 120 for every hundred societies and obtaining funds by levying an auditing fee. Supervision was also to be undertaken by union officials and honorary organizers.

§ 3. THE UNITED PROVINCE OF AGRA AND OUDH.

The following table shows the progress of co-operation in 1914-1915 as compared with the previous year :

Class of Society	No. of Societies		No. of Members		Working Capital	
	1913-1914	1914-1915	1913-1914	1914-1915	1913-1914	1914-1915
					Rs.	Rs.
Central societies. . .	55	58	12,959	11,250	59,09,745	62,99,749
Agricultural societies.	2,560	2,716	99,891	101,753	50,71,014	49,88,282
Non-agricultural societies	185	188	5,755	6,270	4,37,428	4,61,113
Total . . .	2,800	2,962	118,605	119,273	114,18,187	117,49,144

(1) 1 lac = Rs. 1,00,000.

Central Societies. — There were at the end of the year 1914-1915 twenty-three district banks, twenty-four central banks and eleven central banking unions. Of the thirty-five central banks and banking unions twenty-six were affiliated to a larger central bank which financed and supervised them while the other nine worked independently. The rapid increase shown in the previous year in the working capital had not been maintained, chiefly owing to the war and the poor autumn harvest. The paid-up capital had increased from Rs. 6,30,631 to Rs. 7,56,147 and the reserve funds from Rs. 3,11,477 to Rs. 3,86,449, which two sums formed 18.1 per cent. of the working capital as compared with 15.9 per cent. in the previous year. The share capital and reserve funds were together equivalent to 26.8 per cent. of the amount of deposits and loans received by the banks. Reserve funds were being invested outside the banks. The total profit of the banks amounted to Rs. 1,51,517.

Agricultural Societies. — In spite of the war and the disappointing agricultural conditions the capital contributed by members as share capital, reserve funds, etc. was equivalent in 1914-1915 to 26 per cent., of the total working capital, as against 17.5 per cent. and 19.2 per cent., respectively, in the two previous years. The rate of interest paid by members covered the cost of supervision and auditing and some miscellaneous expenses. It was 15 or 15 $\frac{5}{8}$ per cent. whereas most central societies charged 12 per cent.

Audit, Inspection and Staff. — Auditing was done by government inspectors, specially trained professional auditors, whole-time auditors maintained by the central banks but controlled by the Registrar, honorary workers, and the paid staff of the central banks. All the central banks were frequently inspected by the Registrar and his staff.

§ 4. THE CENTRAL PROVINCES AND BERAR.

The progress of the co-operative movement in the Central Provinces and Berar is seen from the following statement:

Class of Society	No. of Societies		No. of Members		Working Capital	
	1913-1914	1914-1915	1913-1914	1914-1915	1913-1914	1914-1915
					Rs.	Rs.
Central societies. . .	38	46	6,131	7,074	38,37,411	43,22,056
Agricultural societies	2,087	2,158	34,313	37,053	25,76,238	28,21,670
Non-agricultural societies	88	93	1,778	2,023	96,284	1,17,595
Total . . .	2,213	2,297	42,222	46,150	65,09,933	72,61,321

Central Societies. — On 30 June 1915 there were one provincial bank, twenty-nine central banks, fifteen agricultural unions and one Central Provinces Union of Co-operative Banks. The working capital of the provincial bank had increased from Rs. 12, 22, 450 to Rs. 13,44,315 and the deposits from Rs. 5,35,933 to Rs. 9,86,796. The working capital of the central banks had risen from Rs. 25,86,613 to Rs. 28,37,460, of which latter sum the share capital formed 21 per cent., deposits by members 13 per cent., local deposits by non-members 27 per cent., and loans from the provincial bank 37 per cent. The interest charged by the central banks on loans was generally 9 per cent. while they paid 6 per cent. on deposits. The provincial bank lent money to societies at $\bar{7}$ per cent. and paid 5 per cent. interest on deposits. The Central Provinces Union of Co-operative Banks had continued to give valuable help to the Registrar in securing unity of aim and effort. Its total income for the year was Rs. 50,411. Failures of crops led to numerous renewals of loans.

Agricultural Societies. — The number of agricultural credit societies based on unlimited liability rose from 2,083 to 2,154—127 being newly registered in 1914-1915. 2,013 societies had been affiliated to central banks on 30 June 1915. Two cattle-breeding societies were working satisfactorily, one at Nawagaon and one at Khandwa.

Audit and Inspection. — The societies were inspected and their books audited by the Registrar, his assistant, the chief auditor and his staff. Considerable work of this sort was done by the Union.

§ 5. AJMER-MERWARA.

The following statement shows the comparative progress of co-operation in Ajmer-Merwara in 1913-1914 and 1914-1915.

Class of Society	No. of Societies		No. of Members		Working Capital	
	1913-1914	1914-1915	1913-1914	1914-1915	1913-1914	1914-1915
					Rs.	Rs.
Central societies. . .	5	5	774	841	7,50,322	8,15,242
Agricultural societies.	352	355	10,387	11,264	7,35,509	7,03,016
Non-agricultural societies	—	—	—	—	—	—
Total . . .	357	360	11,161	12,105	14,85,831	15,18,258

Central Societies. — There were five central banking unions in 1914-1915 as in 1913-1914. At the end of the former year 344 societies had been affiliated to the banking unions and were financed by them, the rate of interest charged being 10 per cent. The net profit of the banks

was Rs. 21,885 as against Rs. 23,026 in the previous year. The reserve fund amounted to Rs. 14,320 as against Rs. 7,373 in 1913-1914.

Agricultural Societies. — In 1914-1915 only three societies were registered, two in the Ajmer district and one in Berar. The share capital of the agricultural societies rose from Rs. 1,23,039 to Rs. 1,68,809, and government loans decreased from Rs. 31,667 to Rs. 21,067.

The societies generally utilized their reserve funds themselves. Auditing and inspecting were done by the Registrar and his staff.

§ 6. COORG.

No new credit society was registered in 1914-1915. The amount of working capital rose from Rs. 1,06,020 to Rs. 1,15,400 and the reserve fund from Rs. 18,106 to Rs. 23,514. The number of cattle insurance societies increased from nine to ten; 434 heads of cattle were insured; and the reserve fund of the insurance societies rose from Rs. 188 to Rs. 590.

Nine co-operative credit societies resolved in 1914-1915 that the dividend due to shareholders should thenceforth be employed on insuring their cattle. The grain bank worked satisfactorily and its profit for the year was Rs. 594-12-5. The repayment of loans was not encouraging, the loans outstanding at the year's end being 12 per cent of their total amount as against $6\frac{1}{4}$ per cent. in the previous year. The societies charged interest at the rate of $12\frac{1}{2}$ per cent on their loans and paid from 5 to $6\frac{1}{4}$ per cent. on the money they borrowed.

The committee and controllers managed the societies satisfactorily. All accounts were audited by the registrar personally.

ITALY.

COLLECTIVE DAIRIES.

SOURCES :

CAMPARINI (Luigi) and RUSCELLONI (Alfredo) : Manuale per le latterie. Appunti di legislazione, amministrazione, contabilità (*Dairy Manual. Notes on legislation, administration, and book keeping*) Published by the "Unione Nazionale delle Latterie sociali e cooperative". Reggio d'Emilia, Typ. R. Bondavilli, 1913.

CERLINI (A.) : La cooperazione casearia italiana (*Italian Co-operative Cheesemaking*) in "Giornale di Agricoltura della Domenica". Special number on cheesemaking, No. 7, Piacenza, 14 February 1915.

BASSI (Dr. Ercole) : Le latterie sociali in Italia (*Collective Dairies in Italy*). Milan, Casa editrice Giacomo Agnelli, 1910.

BERNINI (Dr. Professor Ottorino) : Manuale per le piccole latterie cooperative (*Manual for Small Co-operative Dairies*). Mantua, Typ. A. Mondavi, 1914.

MONTANARI (Dr. P.) : Associazioni per la stagionatura e lo smercio dei prodotti caseari (*Association for Maturing and Selling the Products of Cheesemaking*). Reggio d'Emilia, Cooperativa lavoratori tipografi, 1912.

NICCOLI (Prof. V.) : *Cooperative rurali* (Rural Co-operative Societies). Milan, U. Hoepli, 1909.

REGGIANI (E.) : La produzione del latte e le latterie sociali co-operative (*Milk Production and Co-operative Collective Dairies*). Milan, U. Hoepli, 1908.

NOTIZIE SULLA SOCIETÀ ANONIMA CO-OPERATIVA LATTERIA SORESINESE (*Information as to the Co-operative Dairy having Limited Liability at Soresina*). Published on the occasion of the fourth national congress of collective dairies at Cremona 16, 17 and 18 September, 1912. Soresina, Mariani Brothers, 1912.

UNIONE NAZIONALE DELLE LATTERIE SOCIALI E CO-OPERATIVE (*National Union of Collective and Co-operative Dairies*). Report on the moral activity of the union in 1915. Reggio d'Emilia, Cooperativa fra lavoratori tipografi ed affini, 1916.

The collective dairies are among the most noteworthy and happiest manifestations of the co-operative movement. If indeed there is an agricultural industry which can profit by co-operation — both in point of technique and in point of economy — it is the cheesemaking industry ; and this fact explains the rapid and admirable development of collective dairies throughout most of Italy.

In Italy they have an ancient tradition for in their earliest form they date back to the fourteenth and fifteenth centuries. This form was one

of spontaneous co-operation, resulting on the necessity of using milk industrially. The collective organizations appeared in the mountains where society is most divided and combination is necessary to profit. They are first found in Agordino and Friulia ; then gradually they spread over the whole Alpine chain, penetrating into the provinces of Sondrio, Como, Brescia, Novara and Turin ; they extended into the plain, to Treviso, Vicenza, Reggio d'Emilia and Parma ; and finally, little by little, they conquered, as we shall see, almost all the northern regions.

§ I. THE VARIOUS FORMS OF COLLECTIVE DAIRIES.

Historically collective dairies have three different forms. The first and most rudimentary of these involved the reciprocal lending of milk on a system by which families took turns (1). Some small producers of milk combined and mutually lent each other milk in an order previously established in order that each might treat a larger quantity at one time. Thus the loss was avoided which results on the daily handling of small quantities insufficient to allow of the production of good cheese, or on too long preservation of milk with a view to accumulating a certain quantity of it. The milk was treated successively in the house of every member. The member whose turn it was provided premises, labour, implements, combustibles, rennet, etc., and then deducted a certain quantity of the product, in addition to that derived from his own milk, as compensation for his work ; or, more commonly, he was in the position of having previously supplied his fellow-members with as much milk as he received on the day or days on which his own turn fell, and therefore appropriated the whole product.

It is however easy to see that the draw-backs to this system were not few. Above all it obliged each member to have premises and implements sufficient to treat all the milk produced by the society. Secondly the products could not be uniform but were affected by the greater or less skill of whoever manipulated them. Thirdly milk was collected for the profit of different individuals at different seasons, and the return obtained by individuals therefore varied markedly. These drawbacks suggested a better system which is still extensively followed, especially in the Alpine districts. By this each member to whom the products come in turn supplies the wood, rennet and salt ; but, in distinction to the plan followed under the earlier system, the milk is treated on premises and with implements and utensils held in common, under the direction of an expert in cheesemaking chosen by the society.

However under this system also, although in less measure, each member gains or loses according to whether his turn falls in more or less propitious seasons and the treatment of the milk is consequently more or less

(1) This form still exists to a limited extent in some districts but it is destined to disappear completely.

good. These dairies tend therefore to be transformed and to be organized industrially. The transformation is usually spontaneous for these societies already possess the elements from which a modern co-operative dairy, the third form of collective dairy, can be born. This third form has the following characteristics: milk is treated in common with implements and means owned in common by a single cheesemaker to whom the handling of the products is entrusted; and the products, instead of being shared in kind, are — since turns have been eliminated — preserved on the society's premises and sold on the society's behalf to members or others. The members share the products of sales proportionately to the milk they have supplied and similarly bear the costs of the enterprise. They have a direct interest in the realization of profits and are therefore bound to watch the conduct of the enterprise.

It should be noted further that a collective dairy sometimes arises from a union of small milk producers to whom association is a technical necessity, and sometimes from a union of medium or large producers for whom it is merely a means of obtaining larger profits. In both cases some societies apply co-operative principles in their integrity, so that there are no members who do not furnish milk, while in others co-operative principles are attenuated so that members who are only capitalists are admitted.

As regards their form, collective dairies in Italy are for the most part still free. If they are legally constituted their form is generally that of limited liability co-operative societies and they have a share-capital subscribed by the producers of milk themselves. They also undertake the sale of products. The installation of premises for the treatment of milk is accomplished, and necessary material obtained, by borrowing from financial societies or capitalists. The members furnish the milk, as to the amount of which they agree, settlement for any balance furnished being made at the end of the year. Profits are distributed in proportion to the amount of milk supplied, after a part has been deducted to form the share-capital and the reserve and to amortize the costs of installation. The society is directed by an administrative council constituted by a group of members whose task it is to superintend the technical and economic progress of the business.

§ 2. DATA AND INFORMATION AS TO COLLECTIVE DAIRIES IN ITALY.

In the first place how many collective dairies are there in Italy? What is the number of their members and how much milk do they treat altogether? We are not in a position to answer these questions exactly for there are no reliable statistics as to these organizations.

According to the data of the *Unione nazionale delle latterie sociali*, there are 1,123 of these dairies, distributed as follows: Venetia 455, Piedmont 358, Lombardy 219, Emilia 73, Liguria 6, Central and Southern Italy and the

islands 12 (1). There is information dating from 1915 as to co-operative cheesemaking in the districts of Italy, and this we will briefly notice.

Beginning with the north we find collective dairies very common in fertile Piedmont. There are more than 200 of them in the district of Aosta. These are very small dairies formed by small farmers of the district in which *fontina* is made. They undertake merely the conversion of the milk, the local dealers undertaking the ripening of the cheese. The latter centralize the entire production, a large part of the product being exported. In the province of Cuneo there are seven dairies, some of them very important. The province of Alexandria has only two of them, but in the district of Novara there are about forty, most of which manufacture gorgonzola.

In Liguria there are also some collective dairies, those of Masone and Campoligure having a certain importance.

In Lombardy, in the region of Pavia and Milan, the few large dairies which exist have been let to individuals, but in Sondrio their number reaches seventy-six. In Valtellina there is a much developed cheesemaking industry, practised by numerous small collective dairies, generally of the primitive family type. Cheesemaking is practised by the dairies in winter from October to April-June, generally ceasing in April or May when the cattle go to the May pastures, to consume the forage and afterwards to pass on to the Alps. While the cattle are on these pastures the farmers themselves treat the milk, combined in small groups of five or six families who lend it to each other. They collectively transform it into cheese, taking shorter or longer turns according to the quantity supplied. In all the dairies of the province butter and cheese made without cream are manufactured almost exclusively. In the spring cheese made partly or wholly with cream is manufactured. Only the dairy of Bormio, one of the most notable in the province, produces cheese of the Ermenthal type.

The province of Como has also a large number of collective dairies. The last statistics show that there are more than thirty of them and that they are spreading rapidly, especially in the district of Lecco.

The province of Cremona includes nine of these dairies. Except one at Casalmaggiore, which is small, they are very important and they are managed by the modern methods followed in large dairies. They include the famous dairy of Soresina, the largest in Italy, to which we will devote a special paragraph.

The co-operative dairies in the province of Brescia number more than fifty; those in the province of Bergamo more than thirty (2). In the lat-

(1) These data are approximate, it being in practice difficult to establish precise statistics for these societies, especially such of them as are virtually constituted but are often at work only for a few months, according to the district in which they are situated, dissolving at the end of this period and subsequently reconstituting themselves after a short interval.

(2) Detailed information as to the collective dairies of Lombardy will be found in the report of the jury for the prize competition opened in 1914 by the *Società agraria di Lombardia* for dairies founded in this region before 1913 and dealing with an average quantity of no more than 15 quintals (1 quintal = 220 lbs.) of milk. Twenty-one societies took part in this competition.

ter province the dairies have united in a federation with the object of selling in common butter produced in excess of local needs, in order to obtain higher prices by making collective offers. In the province of Mantua the societies for the sale of milk have also united in a federation which is attached to the agricultural union of Quistello. They are found extensively.

In Venetia co-operative cheesemaking is commonest in Vicenza (forty-two dairies) and Treviso (twenty-one dairies). Among these dairies one is very important, that at Soligo which has establishments at Soligo, Pieve de Soligo and Colle San Martino. In the province of Udine no count can now be kept of the dairies: every village has its collective cheese-factory — there are more than 300 of them. In the region of Belluna there are as many as 160 of these dairies. The first federation of co-operative dairies was founded in this province and has premises at Agordo. Its object is the sale of butter produced by adherent organizations, and it still exists and is working magnificently.

In Emilia some ten dairies are found in the province of Parma — most of them let to business men; there are twenty co-operative dairies in the province of Reggio (1) and four in that of Bologna.

In southern and central Italy there are very few of these cheesemaking industries (2). In Sardinia there is only the dairy of Bortigalli. Hence it is necessary to intensify the propaganda for the formation of these co-operative societies in the southern provinces and the islands.

Co-operative organizations have also been formed to provide milk for the large urban centres, and are constituted by producers, an exception being the *Cooperative del latte* of Milan which is a mixed association of con-

From the report (*Bollettino dell'Agricoltura*, nos. 31 and 32, Milan, 31 July and 7 August 1914) we learn that most of them were of recent foundation. We note however that a few were older, like those of Morbegno, Ponte and Tirano which have existed for more than thirty years. All are co-operative societies except that at Casto which follows the systems of manufacture by turns, and that at Tirano which follows two systems, that of co-operation and that of manufacture by turns. All but three have merely a constitution *de facto*. The building belongs to the society at Gordona (50,000 liras), at Morbegno (18,000 liras) etc. The quantity of milk contributed varies from one quintal a day (Valmores) to 12 quintals (Ello). This milk is treated by experts who often have a diploma for special courses in cheesemaking. The machines and implements are those ordinarily found and form in many cases a very modest equipment; in some they are hired or let by the members. The machines are worked by hand or electricity. The book-keeping of many dairies is excellent, being simple and complete; but in some cases it is insufficient, the defect being rather personal than one of method.

(1) For the organization of cheesemaking in the province of Reggio Emilia see "L'industria casearia nella provincia di Reggio Emilia. Quadri statistici con note illustrative (*The Cheesemaking Industry in the Province of Reggio Emilia. Statistical Tables with Explanatory Notes*), Prof. Cav. GIUSEPPE FASCETTI. Published by the Chamber of Commerce and Industry of Reggio Emilia. Typ. Bondavilli, 1915.

(2) Recently the *Latteria sociale camerinese* was constituted at Camerino. Its object is to supply the population with a wholesome and pure product, inspected by the Office of Hygiene, and to intensify milk production in order that it may keep pace with the demand for dairy produce.

sumers and producers. We should note the co-operative societies of milk producers of Brescia, Tortona, Rome and Turin, as well as that of Milan which we have just cited. In Genoa there is an agricultural consortium (1) which provides the town with the milk it receives from agricultural members. The service for selling the milk is admirably organized by the consortium. The experiment may be called the largest and best of its kind hitherto made in the country.

Most Italian collective dairies, like those of which we have spoken, are on the system of manufacture by turns, which is still the commonest, but they are gradually being replaced by co-operative dairies having a small production. "The dairy of primitive form, working on the system of turns", says Cerlini in the study we have cited, "should succeed in meeting better the fresh needs which follow on the change from this to the co-operative form, as gradually the agricultural conditions of the districts in which it is situated are transformed by new systems of agriculture and intensified production, and as zootechnical conditions are modified by an improvement in cattle-breeding aimed at increasing the yield of milk. It is not only the conversion of the milk and the distribution of the product which is now desired: a larger quantity of milk is used in the dairy and consequently its conversion results in a larger quantity of dairy products, which therefore have to be sold to outsiders so that the milk realizes a price paid to the members no longer in cheese but in cash".

Dairies of the average type are found more or less everywhere in Upper Italy, from Friulia to the valley of Aosta in Upper Lombardy and Emilia: on an average from three to six thousand quintals of milk are treated in them annually, on well arranged special premises, supplied with modern implements and utensils, in which scientific methods are followed.

In the region of Emilia, which is that in which co-operative dairies of the modern type are most extensively found, and especially in the district of Reggio, dairies treating large quantities of milk are also found. For example in 1913 the dairy of Massenzatico treated 6,993 quintals of milk. In eight years it has been possible to obtain results allowing of production on this scale, although at first only 3,425 quintals were treated. Other dairies of the average type are found in the provinces of Reggio, Modena and Parma. In the provinces of Vicenza, Treviso and Udine, in the district of Novara and in Upper Piedmont organizations of the average type are also found, scattered here and there among innumerable very small dairies.

§ 3. A TYPICAL EXAMPLE OF CO-OPERATIVE CHEESEMAKING.

Such an example is provided by the *Latteria Sociale Cooperativa di Soresina* in the province of Cremona. This society has incontestably one

(1) See in this connection *Monthly Bulletin of Economic and Social Intelligence*, December 1915, page 33, "The Organization of the Agricultural Consortium of Genoa for the Sale of Milk".

of the largest cheesemaking establishments in Europe. Its organization is excellent; its working and the quality of its products, a large part of which it exports, might furnish a model to many countries in which the dairy industry is developed. It was founded in 1900, thanks to the action of a great agriculturist, a true pioneer of agricultural co-operation — the engineer Antonio Landrini who died some years ago.

Having constituted itself in the form of a limited liability co-operative society, it proposed to set up one or more cheese-factories in which to treat by perfected methods the milk derived from the farms of members, and to sell the products in common. It also proposed to buy and sell other merchandise and practise certain agricultural industries. To ensure its existence it included two fundamental obligations in its by-laws: *milk-producing members* must deliver the milk emanating from the land they cultivate, the portion intended for the consumption of their families being deducted, for thirty successive years; *landowning members* or non-producers must oblige their farmers to become milk-supplying members. Particular provisions regulate the purchase of shares.

The dairy began to work on 11 November 1900, when it had 91 members who had subscribed 2,913 shares of 50 liras (1) each and who furnished about 150 quintals of milk a day. They had then paid up only half the value of the shares: the remainder was deducted from the profits realized on the dairy products in the first year.

In 1900 the capital in shares amounted to 71,025 liras and the reserve fund to 665 liras. The building of the society's premises had entailed an expense of 83,324 liras and the implements and utensils cost 87,990 liras.

In November 1901 the capital in shares amounted to 159,600 liras and the reserve fund to 25,247 liras; in 1902 they had increased, respectively, to 191,350 liras, and 72,729 liras, and at the end of only a few years, in November 1908, to 208,100 liras and 210,591 liras. The large sums paid into the reserve allowed the repayment of the capital shares, for which the by-laws provided, to be begun. This repayment could be effected wholly in 1909. The number of members increased equally, passing from 101 in 1900 to 153 in 1908, 171 in 1912 and about 300 in 1916.

While the administration of the dairy obtained these results its technique was also perfected; so that while at first it could treat only 150 quintals a day, it could finally treat on an average 500 quintals emanating from within a radius of 10 kilometres (2). It produced at first 184,382 liras' worth of butter and 407,869 liras' worth of cheese, but in 1915 these respective values were 550,000 liras and 1,570,000 liras. The society

(1) 1 lira = $9 \frac{3}{5}$ d at par.

(2) 1 kilometre = 1093.633 yards. The dairy transports the milk from the farms to its premises by means of 50 carts which it owns. During the hot months the milk is chilled at the place of production by apparatus provided by the society. It reaches the dairy having a temperature of from 25 to 26° centigrade.

manufactures daily about four quintals of whey butter and six quintals of butter made from the complete milk and more than 500 cheeses.

The work being so much, it is not surprising that the dairy has a numerous staff, one namely of about two hundred. The number varies with the work as this is influenced by the market. In each season the staff must be proportionate to the needs of manufacture. There are however certain employees who are more stably employed and have even an interest in the profits.

At the head of the dairy there is a manager, and at the head of the factories of various kinds there are experts — Swiss for the Ermenthal, Fribourg and Sbrinz factories; workmen from the Lodi district for the buttermaking; southerners for making the cheeses in demand in the south.

Since the quantity of milk treated has, as has been said, gradually passed from 150 to 500 quintals a day, it is clear that the dairy has developed considerably. It is now supplied with all the most modern cheesemaking machinery.

The society's buildings comprise several large halls. One for washing and sterilizing the cans, which measures about 130 square metres (1) and holds 1,500 cans, is provided with a special mechanism which allows 125 of them to be washed in an hour.

The next in importance is the cheesemaking hall, which contains sixteen boilers having a capacity of 15 hectolitres (2) each. Then there is the buttermaking hall, and there are a large number of spacious rooms in which lactose is prepared, and others used for the preparation of condensed milk and sterilized milk, a recent enterprise.

The attention of visitors is more attracted by the storehouses for the preservation of cheese. There are six of these; three underground, measure altogether 235 metres (3) in length, from 4 to 6 in height and 6 to 11 in width; and three above stairs measure 6 to 11 metres in width and 3.5 to 6 in height. These storehouses contain 30,000 Swiss cheeses and about 130,000 Roman *pecorino* cheeses.

In view of the importance of the process to which the milk is subjected the dairy is obliged to employ considerable motive power. It has six engines: two worked by steam, the combined force of which is about 75 horse-power, and four electric engines having a total force of more than 100 horse-power, as well as four steam boilers of 300 horse-power. The dairy sells and exports most of its products directly. Retail selling is specially limited to cover only the needs of members and the provisioning of neighbouring middlemen (4).

(1) 1 square metre = 1.196 square yards.

(2) 1 hectolitre = 22 gallons.

(3) 1 metre = 1.094 yards.

(4) The dairy of Soresina is a centre which unites all the farmers of the district. It helps them in that it encourages among them various forms of initiative tending to the progress of agriculture. In 1903 it became a branch of the co-operative agricultural consortium of the province of Cremona. It buys on behalf of its members the coal they need for the engines necessary to

These large dairies are not however numerous in Italy. Besides a few others in this same province of Cremona (Piadena, Acquaneira, etc.) and a few in the Milanese and the province of Treviso, the only types found are those of the dairy of average importance and the small co-operative cheese-factory (1).

§ 4. SOCIETIES FOR THE RIPENING AND THE SALE OF CHEESE.

In order that the products of the dairy may conquer the markets they must fulfil certain very definite conditions. As regards cheese, in order that the various kinds may be commercially recognized, form, weight, composition and colour and the content of fat must be preserved unchanged. In order that they may sell well the cheeses must also be well ripened. But the processes necessary to giving them these necessary qualities are not always easily practised in isolated collective dairies or dairy farms; whereas they can be effected profitably by special organizations (federated dairies) which concentrate the products of members, inspect and classify them, distribute them in various groups according to their quality or the needs of the market, undertake the ripening process on suitable premises, and sell them at opportune times, etc.

These ideas were first developed at the National Congress of the Milk Industry at Turin in 1911 (2). Some societies have already attempted something of the kind in Italy for the ripening and the sale of the products of cheesemaking. Thus the *Società Caricatori d'Alpi* of Morbegno (Sondrio), constituted with a capital of 17,000 liras, has formed a collective industry for ripening Bitto cheese. This aims: a) at collecting and preserving in special storehouses the cheeses produced by members; b) at facilitating their sale; c) at promoting the granting of advances in cash, at low rates of interest, by credit institutions to members applying for them,

their threshing and also provides them with the lubricators they use for their agricultural machines. It has founded a co-operative chemical depot which first provides members with all the chemicals they need and secondly sells all manner of remedies to the public at low prices. It has set up essicating ovens for cocoons and grants the use of these to its members in return for a mere repayment of the expenses it thus incurs. It has organized lectures for the instruction of employees in members' byres, and it employs inspectors who watch over the production of the milk, the quality of forage, etc.

(1) In the province of Milan efforts have been made to instal large dairies, especially in the lower district (Casalpuusterlengo, Melegnano, etc.) and in the district of Pavia (Robbio, Candia, Lomellina), but no good results have been obtained. Initial errors, especially those of too expensive installations and of the application of mistaken criteria of technique, made important initiative in favour of the dairy industry in the Lombard district abortive. Other efforts have been made in Piedmont, but outside events which cannot be narrated here caused the dairies which were installed to pass into the hands of business-men and individual capitalists.

(2) See in this connection the report presented to the congress by Dr. P. Montanari which is cited among the sources of this article.

the cheese they have deposited being their security ; d) at assisting enterprises which aim at the development of the cheesemaking and zootechnical industry.

The society proposes to hold an annual exhibition of cheese, and to pay attention to the improvement of this article of diet.

In order to improve the manufacture of dairy products it customarily holds competitions, to which prizes attach, for producers and cheesemakers ; holds courses in cheesemaking ; and organizes cheese exhibitions.

The society's storehouses hold at least 2,500 cheeses. The members who wish to take advantage of them must make application in writing and pay a deposit of 5 liras for each group of 50 cheeses, each of which must bear its owner's stamp. The application must indicate whether the owner will himself take charge of his product, make some one else do so, or make the society responsible for it. The society has special tariffs for storage, and has its own staff who include a director of the storehouse and a certain number of cheesemakers.

The *Società Viterbese Ovis*, for the manufacture of Roman *pecorino*, affords another example of bold initiative in the domain of co-operative cheesemaking.

The large growth of recent years in the consumption of Roman *pecorino* in Italian and foreign markets has caused a need to be felt for an improvement in technique and commercial organization, were it only for the purpose of protecting the pure product from the unfailing frauds of speculators.

Thus several societies have been formed in Latium and in the Abruzzi and Sardinia for the exportation of *pecorino*, and they have special establishments for ripening the cheese. The society which has just been named began its operations by salting the cheese made by the individual shepherds. It now aims at collecting and treating the milk of members on its premises in order that a standardized article of good quality may be placed on the markets. As a guarantee to consumers each cheese is stamped by heat with the word " romano ".

The " Ovis " society already has many members. It ripens about 3,000 quintals of *pecorino* which is commercially absolutely uniform and is sold for prices higher than any previously realized by the members.

In the district of Reggio several attempts have also been made to construct large co-operative storehouses for ripening and selling *grana* cheeses, but hitherto no results have thus been obtained.

In the matter of buttermaking the problem, which is to centralize production and trade in special co-operative organizations, is certainly easier, given the greater simplicity of the technique and the rapid sale of the product.

The *Società Cooperativa delle Latterie Agordine* (Belluno) is incontestably the most important example of its kind in Italy. Another society having a promising organization is the *Federazione delle Latterie Sociali Bergamsche*, founded in 1909, especially with the object of selling on behalf of its members the butter produced by the federated dairies and not sold

by them. In 1913-1914 this federation received 6,231 kilogrammes (1) of butter from its fourteen adherent dairies, and sold this butter at Bergamo, Clusone and Trezzo for 19,731.65 liras. This sum, when 1,236.30 liras had been deducted for costs of transport and packing, postage, etc., gave a balance of 18,495.35 liras, that is 2.96 liras a kilogramme. This initiative was excellently received not only by the dairies but also by all the agricultural institutions, the agricultural consortium of Bergamo undertaking the society's book-keeping and treasurership.

§ 5. THE NATIONAL UNION OF COLLECTIVE DAIRIES AND THE PROVINCIAL FEDERATIONS.

With the object of co-ordinating the co-operative movement in Italy, protecting and assisting collective dairies, promoting their diffusion, and organizing whatever can be useful to the cheesemaking industry and co-operation therein, there was formed in 1907 the *Unione Nazionale delle Latterie sociali e cooperative* which has its premises at Rome. It groups 294 societies (2); and by means of pamphlets of propaganda, other publications and its official organ, *Il caseificio moderno*, it seeks to advance among agriculturists co-operative principles and all technical and scientific knowledge which can develop and perfect the scientific technique of cheesemaking.

Among numerous and various forms of activity its organization of or participation in important congresses should be recalled, among them those of Reggio Emilia, Piacenza, Udine and Cremona, in which the most urgent problems of cheesemaking technique and economy were discussed. We note discussions on: "The exemption from income-tax of the collective dairies"; "Legislation relative to co-operative societies and especially dairy societies"; "Associations of milk producers and cheesemaking societies"; "Milk contracts and producers' societies"; "Itinerant instructors in cheesemaking and co-operative cheesemaking"; "The collective sale of the products of cheesemaking", etc.

Recently the society gave attention to two other questions, the export of dairy produce and the milk supply of large urban centres. With regard to the former it took effective action in relation to public authorities in order that a limited right of export on stated terms might be granted in the interest of the cheesemaking industry, and it therefore formed a special office of commercial information and assistance. With regard to the second question it placed itself at the disposal of various administrations, offering to supply them with milk. It began with Rome and obtained that 25,000 litres (3) of milk should be sent there daily from the large

(1) 1 kilogramme = 2.2 lbs.

(2) It is calculated that the federated dairy societies comprise about 20,000 agriculturists and treat more than half a million quintals of milk.

(3) 1 litre = 0.88 quart.

collective dairy of Soresina of which we have already spoken. The communal administrations of Cremona, Milan, Pisa, Reggio Emilia, Taranto, Florence, Venice, Genoa, etc. were similarly approached.

The union is further in the habit of collaborating in the quarterly enquiries, into the conditions of the international market for milk and dairy produce, undertaken by the Swiss Peasants' League in the interest of producers. These enquiries concern the prices current for forage, and the production and the prices of milk, cheese, butter, etc., The union collects the data of this description needed throughout Italy. It employs in consequence more than a hundred correspondents, who are scattered over the various districts and give information as to conditions in each of these, which the union resumes and communicates to those interested and to the press.

Finally, as a result of the union's encouragement and the initiative of the itinerant chairs, provincial federations of collective dairies have been formed and are in course of formation, and they conduct an enterprise of technical assistance and advice and consultation. We should note in this connection the *Federazione delle Latterie sociali agordine* (Belluno), the *Federazione delle Latterie Bergamasche*, the federations of dairies of the district of Reggio, the lower district of Novara and Lomellina and that of Cremona, and the *Federazione delle Latterie* now in course of formation.

It is evident that Italian co-operative cheesemaking is being, little by little, organized and completed under the impulse and direction given by the *Unione Nazionale delle Latterie Sociali*.

RUSSIA.

POPULAR CO-OPERATIVE CREDIT FROM 1914 TO 1916.

Вѣстникъ Финансовъ Промышленности и Торговли (*Messenger of Finances, Industry and Commerce*) No. 44, 30 October/12 November 1916. Petrograd.

Правительственный Вѣстникъ (*Government Messenger*) No. 273, 21 December 1916-3 January 1917. Petrograd.

§ 1. INSTITUTIONS OF POPULAR CREDIT IN GENERAL.

Present circumstances have not stopped the development of small credit in Russia but have merely made it slower. This circumstance may be said to have favoured establishments of which the previous growth had been very rapid. Their comparative numerical decrease has been counterbalanced by a firmer economic position and a more extensive social influence.

According to the *Messenger of Small Credit* the following new establishments were founded between 1914 and 1916:

Year	Number of Foundations
1914	1,606
1915	956
1916 (1 July).	406

The previous average was 2,000. The new foundations were distributed as follows among the different types of institutions on 1 January and 1 July in each year:

	1914		1915		1916	
	1 January	1 July	1 January	1 July	1 January	1 July
Co-operative credit societies	9,536	10,401	10,687	11,176	11,412	11,649
Deposit and loan funds	3,479	3,728	3,815	3,983	4,042	4,195
Funds of Zemstvos	203	215	232	239	248	266
Federations of co-operative credit societies	11	11	11	28	62	84
Total	13,029	14,355	14,745	15,426	15,764	16,194

The number of the small credit establishments is seen to have passed between 1 July 1914 and 1 July 1916 from 14,355 to 16,194, that is to have increased by 1,739. The increase of the federations of co-operative credit societies from eleven to eighty-four should be especially noticed.

§ 2. THE CO-OPERATIVE CREDIT SOCIETIES AND THE DEPOSIT AND LOAN FUNDS.

a) *Number, members and capital in shares.*

Of the two types of co-operative societies it is those for credit which have most increased, in point of number, of their membership and of their circulating capital. Saving 2.6 per cent. of them which have an urban character they are situated in the country almost exclusively. On the other hand almost half the number (44.6 per cent.) of the deposit and loan funds are in the towns of the south and south-east of Russia.

	1 July 1914	1 January 1915	1 July 1915	1 January 1916
<i>Number of co-operative societies :</i>				
Credit	10,401	10,687	11,176	11,412
Deposit and loan . .	3,728	3,815	3,983	4,042
Total	14,129	14,502	15,159	15,454

Number of members :

Co-operative credit societies	6,948,000	7,228,000	7,714,000	7,787,000
Savings and loan funds	2,199,000	2,261,000	2,306,000	2,298,000
Total	9,147,000	9,489,000	10,020,000	10,085,000

Circulating capital (in terms of thousands of roubles) :

Co-operative credit societies	428,173	382,335	468,138	452,909
Deposit and loan funds	344,989	327,712	341,212	330,950
Total	773,162	710,047	809,350	783,859

On 1 July 1916 the institutions for co-operative small credit comprised more than ten million members, allowing an average of six persons

for each household. This is to say that more than a third of the whole Russian population belonged to them.

The membership of each co-operative society increased at the following average rate :

Year	Increase
1912	40
1913	47
1914	46
1915	51

The number of the members of the deposit and loan funds which reached 595 in 1915 has since been slightly reduced. These funds are less popular than the co-operative credit societies. The latter included as their members, in 1912, 47 per cent. of the population within their spheres of activity, a fraction which has now probably come to be more than half, whereas the funds grouped only 24 per cent. of the population within their spheres.

The capital of the co-operative societies was distributed as follows :

	1 July 1914		1 January 1915		1 January 1916	
	in terms of thousands of roubles	%	(in terms of thousands of roubles	%	in terms of thousands of roubles	%
<i>Capital :</i>						
belonging to them- selves	96,687	12.5	99,501	14.0	110,078	15.4
belonging to depo- sitors	487,508	63.0	472,862	66.6	535,372	68.6
belonging to the State	148,159	19.2	105,218	15.0	95,509	12.3
belonging to the Zemstvos and others	40,808	5.3	32,464	4.4	42,900	3.7
Total . . .	773,162	100	710,045	100	783,859	100

In a certain number of districts the inflow of deposits was so great that the co-operative societies could not utilize them. Paper and specie have therefore augmented considerably, their value passing from 86,416,000 roubles to 141,416,000 roubles, that is 20 per cent. of the amount on the balance-sheets.

b) Purchases and sales effected by small credit establishments.

Owing to present circumstances the co-operative societies are undertaking business usually outside their range of activity or only a very subsidiary part thereof, such as the lending of agricultural machines for the field work of their members, the lending of seed, the purchase and sale of

the agricultural products and the medicinal plants of their members, and the purchase of alimentary products where there are no co-operative consumers' societies or these have insufficient resources. The course of stimulating the activity of consumers' co-operative societies by making loans to them is however preferred. Thus in May 1915 a ruling allowed co-operative credit societies to lend 1,000 roubles — or even more in case of necessity — to co-operative consumers' societies.

In 1915 the following sums, expressed in terms of thousands of roubles, were employed on various purchases :

	1915	
	1 January	1 October
<i>Sums actually paid for purchases :</i>		
by co-operative credit societies	799.4	1,959
» deposit and loan funds.	397	828
Total . . .	1,196.4	2,787
<i>Products of sales :</i>		
by co-operative credit societies.	736	1,886
» deposit and loan funds.	110	647
Total . . .	846	2,533
<i>Merchandise bought :</i>		
by co-operative credit societies.	9,275	15,353
» deposit and loan funds.	2,683	5,480
Total . . .	11,958	20,833

The enterprises organized by the co-operative societies are, besides the corn magazines, co-operative mills in Siberia near the stations of Lebegia, Cocenovov, etc. Quite recent foundations are those of tileworks in the government of Kharkov, tanneries, factories for preserving fruit in Dagestan province, metallurgical establishments manufacturing the requisites of domestic industry, experiments in realizing the value of peat, etc.

c) *Distribution of co-operative societies according to regions.*

The following table shows the number of co-operative credit societies and of savings and loan funds in each region and their financial importance on 1 October 1915 :

Regions	Co-operative credit societies					Deposit and loan funds						
	Number of co-operative societies	Balance sheet	Deposits	Average capital of one co-operative society	Average for one member		Number of funds	Balance sheet	Deposits	Average capital of one co-operative society		
					Capital	Deposits				Capital	Deposits	
					(in terms of thousands of roubles)							
1. Northern	1,313	38,397	24,005	29.5	41.3	25.8	178	7,378	4,073	40.9	92.2	50.9
2. Industrial	1,575	48,611	29,414	30.4	49.6	30.0	272	8,045	3,722	26.8	61.9	28.6
3. Eastern	1,242	54,213	24,282	45.2	61.6	27.6	141	6,625	2,756	47.3	110.4	45.9
4. Central	2,012	91,039	54,008	45.5	56.9	33.8	197	11,897	6,179	59.5	79.3	41.2
5. Southern	1,683	106,776	50,414	62.8	82.1	38.8	537	48,580	20,330	97.2	124.5	50.8
6. South-west	660	23,286	8,308	35.3	55.4	19.8	429	25,845	9,957	64.6	86.2	24.9
7. Baltic	2	377	319	188.5	341.1	290.0	285	84,746	66,600	282.5	65.1	51.2
8. North-west	357	10,934	7,023	30.4	45.5	29.3	444	21,383	12,416	54.5	82.8	47.7
9. Caucasus	1,018	55,518	31,178	55.5	99.1	55.6	349	30,986	16,008	103.3	154.9	80.0
10. Turkestan	273	5,889	675	21.5	70.0	0.8	333	7,506	351	22.5	107.2	5.0
11. Siberia	1,088	33,935	16,267	30.9	79.1	23.5	46	1,320	533	26.4	63.0	25.3

In Transcaucasia popular credit has also begun to develop. There are there 561 co-operative societies having a total capital of 12.3 million roubles and deposits amounting to 2.2 million roubles. The small credit establishments operate exclusively with capital belonging to the State bank, for the Mussulman population is not sufficiently rich to allow an influx of deposits to the co-operative societies. The usefulness of the latter appears in the educative part they play towards the natives and also in their beneficent influence in raising the price of costly crops, such as cotton.

The same phenomenon is noticed in Turkestan where the co-operative societies operate only with State funds, amounting on an average to 70 roubles a member in the co-operative credit societies and 107 roubles in the deposit and loan funds. In the province of Samarcanda there are 110 co-operative credit societies and nine deposit and loan funds, in Fergansk province 132 co-operatives credit societies and 116 deposit and loan funds. The population is very honest and very exact in making repayments, but owing to the religious prohibition to lend at interest co-operative societies cannot obtain deposits.

§ 3. THE FEDERATIONS OF CO-OPERATIVE SOCIETIES AND THE FUNDS OF THE ZEMSTVOS.

The federations of co-operative societies and the funds of the zemstvos, the two institutions which unite co-operative societies, materially or morally, in more or less important groups, have fared differently during the war. While the funds have grown somewhat more slowly than previously the federations have had a relatively large increase, especially since August 1915. Their foundation, which once was a very complicated matter and dependent on the Council of Ministers, has since that date become easier; and federations may now be formed with the authorization of only the Minister of Finances. Consequently their number has, as we have seen, increased from eleven to eighty-four. In January 1915 the average number of co-operative societies grouped by a federation was 1,322, in July 1916 only 188.

The distribution of federations according to regions is as follows :

Regions	Number of federations
1. South	15
2. Little Russia	10
3. Industrial	9
4. East	9
5. Central	8
6. Siberia	7
7. Ural	6
8. Caucasus	4
9. South-West	3
Total	71

In the other regions the development of federations is for the moment unimportant.

Government foundation subsidies to the new federations amounted in 1915 to 80,000 roubles for the federation of Jekaterinburg, 40,000 roubles for that of Ufim, 30,000 roubles for that of Kheadrin and from 5,000 to 20,000 roubles for each of the other federations.

The increase in the sum in the balance-sheet of the ten federations which existed before the war, between 1 January 1913 and 1 January 1916, shows their development.

Federations	Year of foundation	Balance-sheet on 1 January (in terms of thousands of roubles)			
		1913	1914	1915	1916
Kiev	1907	1,195.2	2,126.0	3,117.7	3,048.8
Coubanj.	1911	286.3	784.2	1,119.4	2,274.5
Tersk	1911	—	378.2	781.7	1,532.9
Jekaterinburg . . .	1907	223.3	384.8	570.4	1,561.8
Jekaterinoslav . . .	1911	79.4	230.6	516.7	745.9
Melitopol	1903	245.5	255.2	422.3	840.3
Nijnij-Novgorod . .	1911	—	190.0	570.2	1,124.1
Berdjansk	1901	143.5	155.9	284.8	281.7
Zlatoust	1911	31.8	83.7	133.2	349.7
Stavropol	1907	68.9	80.3	130.7	348.4
Total		2,273.9	4,667.9	7,747.1	12,108.1

The sum on the balance-sheets of these same federations was 21,510,800 roubles on 1 April 1916 and that on those of fifty-two federations was 42,725,400 roubles on 1 July 1916.

Deposits occupy the first place on the balance-sheet, accounting for 4,521,300 roubles, namely 59 per cent. of the balance-sheet of 1 January 1915, and for 7,407,000 roubles, namely 61 per cent. of the balance-sheet of 1 January 1916, in the case of the ten federations named. The purchase of merchandise by the federations and the sale of articles produced by members of the co-operative societies are sufficiently remarkable, as is seen from the following figures which refer to thousands of roubles :

	1915	1916
Debts of federations to suppliers of merchandise . .	175	385
Sales effected	197	494
Amount of merchandise bought	302	1,026

The mutual relations of the federations begin to develop. Thus seven southern federations have united to form a common selling and buying office and to bring out a paper, "Southern Co-operation". The federation of Pjatigovsk has entered into relations with that of Zaritzin and those of the Caucasus in order to procure wood of good quality. A tendency

is defining itself to form among the federations local units of the same type, like the Popular Bank of Moscow (1).

The number of the funds of the zemstvos, of which the first was founded in 1907, passed between July 1914 and July 1916 from 215 to 266, increasing, that is, by forty-one. The total sum on the balance-sheets of these funds was one hundred million roubles in July 1915, deposits amounting to sixty-five million roubles. The very rapid development of the federations of the co-operative societies and their larger activity has raised the question of their relations with the funds of the zemstvos and the definite organization of the latter. Perhaps they will transform themselves into banks of the zemstvos, enlarging the sphere of their activity which will come to embrace not only small credit but also the more important forms of agricultural, communal and co-operative credit.

§ 4. GOVERNMENT SUBSIDIES TO INSTITUTIONS OF SMALL CREDIT.

The chief sources of the government subsidies to small credit institutions are, in the case of short-term loans, the Bank of the Empire, in that of loans maturing slowly the savings banks (2), especially when the necessary capital has to be obtained for the constitution of small credit establishments. The sums granted by the government have been of recent years as follows :

1914	264	million roubles
1915	313	» »
and on 8 July 1916	380.9	» »

of which 320 million roubles or about 80 per cent. emanated from the Bank of the Empire and 60.8 million roubles from the State savings banks. Small credit institutions do not however exhaust all available credit in the Bank of the Empire and the savings banks. The following table shows the relation existing between the credit granted by the Bank of the Empire from 1914 to 1916 and the indebtedness to this bank of the small credit institutions :

		Credit granted	Indebtedness	%
		(millions of roubles)		—
1914	October	240	129	53
	December	256	94	36
	January	260	84	32
1915	July	275	151	54
	December	306	75	25
1916	January	308	69	23
	July	319	68	21

(1) See our issue *Bulletin mensuel des Institutions Économiques et Sociales*, October 1912, « *La Banque Populaire de Moscou et son origine* ».

(2) See *International Review of Agricultural Economics* June 1916, page 24, "Popular Co-operative Credit" (*continued*).

The savings banks are in the same case. The credit they had granted to small credit institutions amounted on 1 January 1916 to 143.9 million roubles, of which sum only 48.2 million roubles — that is 33.5 per cent. — had been effectively lent to the small credit establishments. The cause of this state of affairs should be sought in the inflow of deposits to the small credit establishments and the growth of their own resources. It is proposed therefore to allow the funds of the State savings banks to be lent not only to co-operative societies, as is provided by the law of 21 June 1910, but also to the zemstvos and to the federations of the co-operative societies, to be used for long-term agricultural and land credit and for the building of granaries.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

AUSTRIA.

THE OBJECT AND THE TASK OF THE « ALLGEMEINE OESTERREICHISCHE VIEH-
VERWERTUNGSGESELLSCHAFT » (*General Austrian Society for the Sale of Cattle*)
Appendix to the report for 1915-1916, Vienna 1916.

The General Austrian Society for the Sale of Cattle was founded in 1913 on the advice and with the co-operation of the Imperial and Royal Ministry of Agriculture. Its aims are :

1. The establishment and use of a public market for breeding and income-producing stock which will be equally accessible to production and to trade in the kingdoms and provinces represented in the Reichsrat ;
2. The purchase and sale of breeding and income-producing stock and stock kept for slaughter, on behalf of the society itself and others ;
3. The acquisition and letting and employment of properties, the fattening of stock and the realization of profits thereon, and the formation and management of enterprises intended to favour the sale of live stock — the exigencies of provisioning being always taken into account fairly.

The chief object of the society is thus to establish business relations between producers of live stock and those who realize profits on stock on the one hand, and between butchers and others analogously placed and consumers on the other.

The society's public usefulness is shown by the fact that it takes into account the wants of all interested persons :

a) In that ever since its foundation it has offered to breeders of live stock the opportunity to sell their produce as little expensively as possible, delivering them from the onerous guardianship of a superfluity of middlemen ;

b) In that it takes common interests into account, participating, by its intervention in the central market for live stock of St. Marx and the great market, in providing meat for the town.

The town of Vienna, numerous agricultural organizations, certain of the principal corporations, certain agriculturists, the *Allgemeine Depositenbank* — such are the organizations which participate in the enterprise financially. As regards the financial management of its business the by-

laws establish that the society is a commercial enterprise which should fulfil the elementary duty devolving on every such organization, that namely of meeting its working costs, paying fair interest on its working capital, and forming certain funds which will allow it to reach as soon as possible the end it has before itself.

With a view to this end the society undertakes the following business :

1. The sale on commission of live stock for slaughter in Vienna and other towns of the province ;
2. Trade in live stock for slaughter, on its own account and on the basis of the business relations already mentioned ;
3. The sale of slaughtered stock and meat in Vienna and the provinces, on commission and on the society's own account ;
4. The sale of breeding and income-producing stock.

The trade in breeding and income-producing stock, which has existed since the initiation of the enterprise and has become a special branch of the society's business, has affected 20,000 heads of stock a year. The society furnishes an abundant supply of milch-cows from the Alps, Switzerland and Holland to Vienna and other large towns. From most farms to which it sends milch-cows, stock intended for fattening and traction-oxen, it receives stock fattened for slaughter. The society has given a most important place on its future programme to the reorganization of the Viennese market by the formation of regular markets for breeding and income-producing stock.

The live stock market in Vienna is exclusively occupied by butcher's stock : the cattle brought to it are all without exception slaughtered, whether they be fitted for the butcher's market or not. Naturally many animals always enter it which have not reached the right stage for butchery, and a deplorable state of affairs results.

The society therefore proposes in the interests of all concerned to debar from the slaughterhouse this unfit stock, that is to say to prevent or at least to reduce irrational slaughtering. Such an end might be reached by joining to the markets for fat stock complementary markets for breeding and income-producing stock. There should be a large weekly market of the latter kind before that of stock for slaughter, into which beasts unready for immediate slaughter would thus not enter even although economic or speculative motives caused them to be sent to it. The selection thus practised would cause those interested to procure and sell in the market the animals which they raised, fattened, utilized for traction or otherwise, or which they had bred for these various ends. At the same time a choice could be made of animals suitable to slaughter or unsuitable to be kept, and as soon as the first market closed they could be taken to that for butcher's stock. Thus the latter would secure stock of a very different quality, suited to the demands of the inspectors of meat and the interests which ought to be respected. In practice the course of this trade would be such that most of the animals brought to the market for income-producing stock would be restored to agriculture and would return to the butchers' market from three to six months later, when their condition was better suited to

the end in view. They would have been fed and have gained noticeably in weight and quality. Thus consumption would not be robbed of this stock which would on the contrary eventually augment the quantity of meat. Since the society has already established business relations with large and small stock keepers, breeders and fatteners in all the provinces, the institution and organization of such a market as we have described — at Vienna in the first place — would meet with no insurmountable obstacles.

The Society's *share in Vienna's provision of meat* amounted in its first year — 1913-1914 — to 5 per cent. of the total supply and to 13 per cent. at the end of the second year. The society has already, by this means alone, acquired on the Viennese market an influence which may increase, the more so because, being constantly superintended by the government, it can face extreme fluctuations in prices.

Guided by the moral duty imposed by its participation in the provisioning of Vienna, the society has often undertaken risky business by which it incurred loss, as for example the importation of live stock for slaughter and meat from northern countries. Its very extensive business relations and its important functions of public supply allowed it however to attain during its third year to a turnover of about 170 million crowns (1) whence it derived a net profit of 5,000,000 crowns.

When the war broke out the society was obliged to become busy over the supply of war provisions, to which the course of events naturally gave a large preference over normal business. It offered to supply live stock at cost prices, as to which it furnished evidence, adding only the actual costs of the transaction. Before the stage of providing public supplies of this kind was reached, the society was for long responsible for buying on its own account large quantities of live stock for slaughter and placing them at the disposal of the imperial and royal administration of the army at given times and on given terms. This mode of delivery involved enormous risks not exemplified in the case of delivery on commission, those namely of the dangers run by the stock and the losses they suffer during transport by railway. They are then exposed to loss of weight, to the outbreak of illnesses, and to the infection of epizooty attaching to large centres in which stock are collected. We should mention also the fluctuations of prices which cannot be anticipated and for which no allowance can therefore be made.

The representative of the Imperial and Royal Ministry of Agriculture, by which the entire administration is controlled, takes part in all the society's councils, meetings and assemblies and can control at any time the management of its business and enterprise.

Finally its by-laws, the governmental decrees and its engagements oblige the General Austrian Society for the Sale of Cattle to limit the interest on its shares to 5 per cent. and to pay a part of its profits into the funds of which the constitution is prescribed. As for eventual excess profits the Imperial Ministry of Agriculture will decide how they are to be employed.

(1) 1 crown of gold = 10 $\frac{1}{12}$ d. at par.

UNITED STATES.

- I. THE CO-OPERATIVE PURCHASE OF LIVE STOCK IN WISCONSIN. — Article by Howard I. Wood in *The Banker Farmer*, Vol. IV, no 2, January 1917, Champaign, Illinois.

In order to improve the quality of milch-cows and secure the general inspection of their milk some banks in Marinette county, Wisconsin, formed in 1915 a Co-operative Cattle Buying Association. The members of this organization are business men, farmers and the eleven banks of the county. In 1915 it bought only one car-load of cattle for the farmers, who showed a disposition to await further results before doing more. But every farmer supplied with cattle was satisfied, and in 1916 confidence had been established. During 1916 fourteen car-loads of cattle, averaging thirty head to a car, were imported from various parts of Southern Wisconsin; and a large number of good animals were also bought from dealers in the county and sold to farmers who wished to build up their dairy herds.

The organization is very simple. The eleven banks advance money for the purchase of pure-bred or grade Holstein or Guernsey dairy cattle, and allow buyers to pay for them at the rate of from \$3 to \$5 per month a head, paying interest at the rate of 6 per cent. Payment can be made at the bank nearest to the home of the purchaser, who gives the necessary security. When enough orders have been accepted to make up a car-load the buyer of the association goes to some locality where he can obtain an entire car-load in one lot at favourable prices. Expenses of transport are thus kept low. Hitherto the cattle delivered in Marinette county have cost only \$9 a head more than the price at which they were bought. The buyer has always had without charge the services of an expert dairy cattle buyer from the university of Wisconsin.

A small percentage is laid aside for a sinking fund in case losses due to unsatisfactoriness of the bought stock have to be made good. But for the fifteen car-loads, costing altogether about \$40,000, there have been only two or three minor cases of taking money from this fund.

The number of cattle bought and the amount of money spent give only a meagre idea of what the association is doing. Besides the actual addition to the value of the farms, an entire county has been brought to believe in the value of dairy farming. Bankers have been taught what a dairy cow is worth and what it ought to produce annually. It has become easier for all dairy-farmers to obtain credit in the banks. A practical proof of success is the fact that ten new cheese-factories were opened in 1916.

We reproduce a series of questions and answers which show the association's skilful method of explaining to farmers its procedure and the advantages it offers:

" Question. How much do I have to pay down when I get my stock ?

" Answer. Nothing is required, but of course it is to your advantage to pay a little down if possible.

" Q. I like to see my stock before I get it. Would it be possible for me to go along and see the stock before they buy it ?

" A. Yes. If an applicant desires he may go with the men who buy the stock and pick out those he wishes, but he must do so at his own expense.

" Q. My neighbour has a good cow for sale, cheap, and I would like to buy it but have not the money. Will the trustees buy it for me and allow me to pay for it on time ?

" A. Yes, under certain conditions. If your application has already been accepted the trustees will send some one to see the cow, and if their report concerning her is favourable she will be bought for you.

" Q. How many cows will the association buy for one person ?

" A. There is nothing to limit the number provided the applicant shows he has pasture and feed for them and can give proper security. The intention is not to buy whole herds for any one person but rather a few head, and give the farmers who need assistance a start.

" Q. I like Jersey cattle : will the trustees help me to get them ?

" A. When the present plan was inaugurated it was decided to restrict the time payments to Holstein and Guernsey cattle only. The reason for this was that there were more of these in the county, and it would be better to encourage the breeding of them and make this a centre for these breeds. If however you can pay cash they will help you to get any breed of dairy cattle that you wish.

" Q. I have the money and intend to pay cash for my stock : what advantage is there in buying through the association ?

" A. The advantages to you are these : you get cheaper transportation rates because the stock is shipped in car-load lots ; you also have the services of an expert judge of dairy cattle, free of charge, to assist in the selection of your stock.

" Q. I do not like to give a chattel mortgage on anything : will the trustees accept my note if some responsible person would sign it with me ?

" A. Yes, the trustees will accept a note if it has a good endorsement, and not require a chattel mortgage. The only object of the mortgage is to secure the note and protect the guarantors, as far as possible.

" Q. I am anxious to raise beef cattle. Will the trustees help me to obtain them and allow time payments ?

" A. No. The trustees have received their instructions to buy only Guernsey and Holstein cattle, either grades or registered, and allow payment on time.

" Q. I would like to pay for my cattle in payments six months apart, rather than monthly. Could that be arranged ?

" A. Yes. The plan of monthly payments is not ironclad, and we will try to accommodate those who, for good reasons, desire some other method of payment.

"Q. Is it always possible to get exactly the kind of stock everyone wants?

"A. Sometimes it is very possible and in certain instances it may be impossible. Where such difficulty is encountered the men who are buying use their own best judgement and get as near as possible what the applicant desires.

"Q. If I do not like the stock when it arrives will I be compelled to accept it?

"A. Yes. According to the terms of the application and agreement you are bound to accept the cattle when they arrive. The trustees are your agents and you must take the stock they get for you.

"Q. How much commission is charged for buying the stock?

"A. None whatever. In addition to the actual cash expenses of getting the stock and delivering them, a charge of two dollars per head is made, to cover necessary expenses of printing, postage, interest on money used on buying the cattle, etc. In time this may possibly create a small reserve that could be used to pay any losses that might occur.

"Q. Isn't there a danger of tuberculosis when stock is shipped from so many farms in different sections of the State?

"A. None whatever: the cattle are all tested for tuberculosis before being shipped".

The following is the form of "application for time payment":

"The undersigned hereby applies to trustees appointed by the Marinette County Advancement Association, for the loan of, dollars, or a sufficient sum to purchase . . . cows, . . . heifers and one male . . . years old.

"The breed to be

"The following is a true statement of the undersigned's resources and liabilities:

<i>Resources.</i>	<i>Liabilities.</i>
Description	Amount owing \$
Acres land cleared . . .	To whom?
Value \$	Nature of security?
Acres partly cleared . .	
Value \$	
Acres wild	
Value \$	
Horses and cattle, value . \$	
Machinery \$	
Other resources \$	

"I. The Undersigned For Value Received, Hereby agrees to pay said Trustees, or their order, on or before three years from this date, the sum required to pay the entire cost of the animal purchased by him, with interest at 6 per cent. per annum, interest payable semi-annually, such obligation to be evidenced by a promissory note to the undersigned.

" 2. The Undersigned Further Agrees, to pay to said Trustees or their assigns at stated intervals each month not less than . . . per month for each animal so purchased by him until the aforesaid sum and interest is fully paid.

" 3. The Undersigned Further Agrees, to breed the cows and heifers so purchased to a registered sire of the same breed.

" 4. The Undersigned Further Agrees, to secure the payment of said sum and interest and the performance of this agreement, by a promissory note and a chattel mortgage to said trustees upon the animals so purchased and the following additional security . . .

" 5. The Undersigned Further Agrees, To accept the animals that are purchased for and delivered to him by the trustees hereunder and pay for the same as herein provided.

" . . . Animals will be labelled at time of purchase and delivered to party ordering same at point designated by trustees. Upon delivery the purchaser shall pay to the Trustees the original cost of the animals together with the expense of purchasing and delivering of said animals . . ."

* * *

2. NORTH CAROLINA RURAL BANKS. — *The Country Gentleman*. Philadelphia, 9 December 1916.

North Carolina was the first state in the Union to establish, by legislative enactment, rural credit unions. Short-term loans are made to farmers at six per cent. interest.

These rural banks are modelled on the country banks of Northern Italy, and loans are restricted to purposes of acquiring land and making farm improvements. The initial North Carolina society was organized at Lowe's Grove, Durham Country, on 20 January. Since then six similar clubs have been created. The marketing division of the State Department of Agriculture controls the unions and a superintendent has been employed as whole-time officer.

A recent monthly statement as to the condition of these banks makes this composite showing: membership, 252 farmers; depositors, 38; payments on shares, \$1,763.20; deposits, \$1,654.68; loans, \$3,203.05; number of borrowers, 35; rediscounts, \$1,290.00; cash in banks, \$1,597.89; total resources, \$4,883.70.

While the chief aim of the unions is to escape payment of exorbitant rates of interest on loans for farm improvements, co-operative effort in other fields is encouraged. The Lowe's Grove Union reports a purchase of 114.3 tons of fertilizers for a cash payment of \$3,050.02. The saving effected by the members of the union by buying co-operatively instead of at the prevailing community prices was \$667.43. Drowning Creek, another credit union, reports "the purchase of a carload of cottonseed meal co-operatively

by eight members. They got the same prices and discounts that the richest man of the biggest plantation in the State could get ”.

Neighbouring city banks and deposits of members are the sources of revenue of the rural banks. The union is empowered to borrow money from any source, provided such indebtedness do not exceed the capital, surplus and reserve fund.

Essentially the plan is as follows: members of the society in need of financial aid make application to the finance committee, composed of farmer members. Loans are pledged at six per cent. interest, without commission, on property as security. Tenant farmers obtain loans on securing the indorsement of their landlords. The farmer buys his supplies for cash according to the plan of the co-operative society.

Part II: Insurance and Thrift

CHILE.

THE FIRST THRIFT CONFERENCE AND THE SAVINGS BANKS OF CHILE.

SOURCES :

- BORROS BORGOÑO (Louis) : Las Cajas de Ahorros (Savings Banks). Communicated to the First Thrift Conference. *La Informacion* (organ of the savings banks), Nos. 1 to 7, Santiago, April to October 1916.
- ROMERO HERRERA (Alberto) : Las Cajas de Ahorros (Savings Banks). Antecedents, Chilian Regime, Conclusions. Communicated to the same conference. *La Información*, No.8, Santiago, November 1916.
- ARCE, LEONCIO : Los resultados lejanos de las Cajas de Ahorros (The Far-Reaching Effects of Savings Banks). *La Información*, No. 5, Santiago, August 1916.
- BAEZA ESPIÑEIRA (Agustin) : Lo que significa la Población agrícola de Graneros (*What the Agricultural Colony of Granero represents*). *La Información*, No. 1, Santiago, April 1916.
- EL MERCURIO, journal of Santiago, years 1915 and 1916.

Our readers are already aware of the importance acquired in recent years by savings banks in Chile. We have already had occasion to notice in this Review the influence of these institutions on the development of mortgage credit in the country (1). The importance of Chilian savings banks becomes however more remarkable when it is remembered that Chile is not an exclusively mining country but eminently one of agriculture and colonization, and that a large part of the capital accumulated in these banks emanates from the rural districts. The activity of the savings banks is therefore largely directed towards procuring advantages for the rural population.

(1) See *Monthly Bulletin of Economic and Social Intelligence*, March and April 1913, pp. 93, 109.

The development realized in spite of their youth by the Chilean savings banks, and their wish to justify as completely as possible the country's confidence and esteem, caused a meeting or congress of representatives of all such banks in the republic to be held at Santiago towards the end of 1915. Its labours lasted into the first week of 1916. In this First Thrift Conference the work of recapitulating the results obtained by the various banks, from a historical and an economic point of view, was undertaken; and the method by which their development and progress could be facilitated, allowing for increasing public support, was studied. With this object the meeting approved the formation of new services especially beneficial to small saving and therefore to the working classes. Some of them have already been at work in the banks since the last months of 1916. We will explain their organization when we have briefly reproduced some of the data as to the activity and evolution of Chilean savings banks which were placed before the meeting.

§ 1. DEVELOPMENT AND EVOLUTION OF SAVINGS BANKS.

In the article to which we have already referred the origin and organization of Chilean savings banks are explained (1). We will here give some data as to their activity and their character.

We would recall that the pioneer savings bank of Chile was that of Santiago, founded on 6 September 1884 on the initiative of the Mortgage Credit Bank. The law constituting the latter provides (art. 126) that "when the reserve fund is sufficient to fulfil the objects specified by the law the council will assign its receipts in delayed interest to the assistance and encouragement of the savings banks which are founded and which, by the terms of their by-laws, must invest their funds in letters of credit".

There had, it is true, already been attempts to institute savings banks in Chile; but these attempts had failed, and it may be stated that hitherto their sole result had been to provoke the suspicion of the mass of the people. To this fact must be ascribed the prudence with which the organization of the new institution was undertaken, and the measures of foresight and guarantee by which it was safeguarded.

The Savings Bank of Santiago was placed under the auspices of the Mortgage Credit Bank, the latter's managing council being responsible for its administration and superintendence. The Mortgage Credit Banks placed at the disposal of the savings bank the necessary capital (50,000 pesos) (2) for the constitution of its reserve fund and its guarantee fund, and further allotted to it an annual grant with which to meet all costs of management. On these terms the Savings Bank of Santiago was orga-

(1) See the article, already cited, in our issue for April 1913.

(2) 1 peso of gold = 1.512 s at par.

nized as a private establishment under the general law of 22 August 1861, and it formed a corporation in virtue of the decree of 27 June 1884 which approved its by-laws.

In order to extend the advantage of thrift to other provinces and encourage it throughout the country, the council of the Mortgage Credit Bank accepted from the government a further charge to form other savings banks in different towns, with the help of sums supplied for such end by the State. New banks were thus founded between 1901 and 1910 in Valparaíso, Iquique, Concepción, Antofagasta, Talca, Chillán, Valdivia, Serena, Curicó, Temuco, Tacua and San Felipe.

As the activity and the working of these establishments won complete approval, the public authority prescribed by the law of 22 August 1910 that all those in existence and all which should in future be constituted should be grouped in a single institution called the National Savings Bank. Its direction was entrusted to the council of the Mortgage Credit Bank; it received complete administrative autonomy and full liberty to organize its activity.

We should note however that this fusion did not affect the Savings Bank of Santiago which continued to do business within the province from which it took its name in the most complete independence of the National Savings Bank, although it fulfilled the latter's function of a central bank within Santiago province where it reigned exclusively. Thus it has come about that there are now two organs of thrift in Chile: the Savings Bank of Santiago, a private establishment; and the official National Savings Bank. The two are absolutely independent of each other, but generally act in agreement in order to encourage thrift and popularize its principles. Moreover both are directed by the managing council of the mortgage credit bank.

Since 1911, that is since its formation, the National Savings Bank has founded central offices at Rancagua, Canquenes, Linares, Angeles, Asorno and Puerto Montt; and these make, together with those founded in the preceding period, a total of eighteen central offices. In addition thirty-five branch offices and many post-office agencies are active in the country.

Since they have been founded the Chilean savings banks have always conducted their business with perfect regularity. Their administrative council, which has most extensive powers, has reformed and modified their organization with a view to a better discharge of their tasks.

At first the by-laws allowed deposits to be invested only in letters of credit of the Mortgage Credit Bank. This investment seemed at first to be justified because it fulfilled the legal provision authorizing this institution to employ its funds for the encouragement of savings banks.

But subsequently, in order to allow depositors to utilize their deposits rapidly as a means of becoming landowners, and also in order to encourage the formation of small holdings, the administrative council made the decision — still recent — that deposits may also be used for the purchase of properties to be ceded immediately to depositors, on certain conditions.

As the savings banks have never fixed a minimum for deposits all workmen and artisans may bring them their savings, however modest. For this purpose savings stamps and money-boxes have been instituted. The stamps are sold at 0.20, 1 and 5 pesos ; and are placed in special books which are presented in order that they may be converted into deposits.

The Savings Banks of Chile use for their business non-transferable savings-bank books, and have opened two classes of current accounts — those repayable at sight and those for fixed terms and on conditions. Certain restrictions as to available sums and the orders which may be issued are imposed with regard to the former. Interest at the rate of 5 per cent. is paid on savings deposits.

Savings banks are exempt in Chile from the payment of the tax on stamped paper and the stamp tax, as from taxes on the postal orders they send. They pay no postage on their postal and telegraphic correspondence.

§ 2. THE ACTIVITY AND THE DIFFERENT SERVICES OF THE BANKS.

The development of the business of the Chilean savings banks was at first somewhat slow, but was afterwards accelerated — especially during the last five years — so that the lack of initial speed has been outweighed. Thus thirty-two years after the foundation of the Savings Bank of Santiago the banks at work in the country have a total sum in deposits of 107,415,241 pesos, corresponding to 604,420 savings-bank books.

In view of this diversity in the intensity of the development of their business, the activity of the banks may be divided into two periods — one of weak development lasting from the foundation of the Savings Bank of Santiago to the constitution of the National Savings Bank, and one of intense development lasting from the time of that constitution until the present day. This is not to say that the increased activity is due solely to the National Savings Bank, for the development of the Santiago bank is perhaps more considerable in the second period. It is however true that the constitution of the national bank was coincident with the winning by savings banks of public favour, and responded to the consequent demand ; and that it marked the beginning of their most active period.

The following table shows the movement of deposits in these two periods, for every five years and for every year, respectively.

The Deposits and the Savings-bank Books of the Savings Banks.

On 31 December	Savings Bank of Santiago		National Savings Bank		Total for the two institutions	
	Books	Deposits	Books	Deposits	Books	Deposits
		pesos		pesos		pesos
1884	861	76,225	—	—	—	—
1889	15,124	1,733,429	—	—	—	—
1894	32,742	3,642,787	—	—	—	—
1899	41,708	3,429,917	—	—	—	—
1904	60,299	5,296,613	—	—	—	—
1909	85,640	12,055,063	—	—	—	—
1910	91,685	14,335,451	206,145	19,525,874	297,830	33,861,325
1911	112,232	20,933,019	256,181	26,301,754	368,413	47,234,773
1912	132,649	25,439,913	304,164	40,088,069	436,813	65,427,982
1913	153,066	29,427,391	359,622	57,032,670	512,688	86,460,061
1914	165,815	32,523,431	396,488	62,327,057	562,303	94,850,488
1915	177,481	35,213,213	426,948	72,202,028	604,429	107,415,241

These figures give rise to several observations. It is seen that those having reference to the Savings Bank of Santiago show a larger proportionate increase in the number of savings-bank books than in the amount of deposits, while the converse is true of those referring to the National Savings Bank. Hence it may be deduced that working people deposit small savings more largely in the former than in the latter establishment. On the other hand the fact that from the time of its constitution the services of the National Savings Bank were — by its branches and agencies and the post-offices — made available for the rural population, and the fact that the total sum of deposits for the whole country is increasing considerably, allow the conclusion that this increase is greatly due to an influx of deposits from rural districts.

The most important point brought out by the figures is however that a certain habit of saving has been little by little acquired by the population, and that there is absolute confidence in the investment offered by savings banks to capital and certainty as to their soundness. As regards the employment of funds they are converted into first class commercial values or into real estate, on behalf of the depositors.

The repayment of deposits is subject to no risks: the banks make no difficulty about reimbursements — so long of course as the term of deposit has been exhausted. Up to the present — even during the periods of economic crisis through which the country has passed — the savings banks

have not deferred payments and reimbursements. It is even a fact that during these periods there has not only been no diminution but also a slight intensification of the movement of deposits. During the months of 1914, which were characterized by general cautiousness and the paralysis of business and of agricultural and industrial work, as a consequence of the European war, the savings banks had to repay the deposits of many unemployed labourers and workmen. This demonstrated completely to the whole working-class population the advantages they could derive from the banks in times of famine and unemployment. The banks were able to meet the withdrawals without any moratorium. General confidence in them was strengthened; and the remarkable circumstance was produced that at this abnormal time the increase of deposits in the banks of the centre and south not only compensated for the important withdrawals from the banks of the north — in consequence of the crisis in the saltpetre industry — but caused the total business of the year to show considerable improvement on that of 1913, as is seen from the foregoing table.

The reserve funds accumulated by these two institutions, the Santiago Bank and the National Bank, amount to 3,361,234 pesos. In view of the fact that the annual profits begin to reach a considerable sum, the administrative council of the bank hopes the time is not distant at which their reserves will enable them directly to advance social progress in the country and the development of its wealth.

The management of the banks has modified their organization wherever experience has made this advisable in view of the constant progress. Deposits on current account with a special service of cheques have been introduced, as a complement to the ordinary savings deposits which bear interest at a higher rate but which are limited in amount and subject to certain rules. Thanks to these deposits on current account the small proprietor, small tradesman or manufacturer who has a deposit in a savings bank can also deposit his other funds there, thus localizing the movement of his business. The usefulness of deposits of this class compensates for the costs entailed by small savings deposits, and allows moreover the accounts called privileged to enjoy a special rate of interest.

In all the offices of Chilean savings banks a service of cheques payable at sight and of telegraphic orders has been established. The service of savings stamps exists throughout the country and aims at collecting savings less than ten pesos in amount. Post offices and thrift among school-children are responsible for popularizing this device. The money-boxes have also been very well received, 8,000 of them having been distributed in four years.

§ 3. MEASURES FAVOURING THE WORKING CLASS IN TOWNS AND IN THE COUNTRY.

The work accomplished for the working class by the savings banks of Chile is not limited to the direct encouragement they give to popular

thrift, nor their indirect action in favour of credit, but has also other forms and aims at procuring as much well-being as possible for working people in the towns and in the country.

Therefore side by side with the services of which we have briefly spoken, and which are peculiar to savings banks, there are forms of activity which in a measure enter into the same sphere and which complete these services by rendering it possible for the humbler classes of society to utilize more rapidly and more profitably the fruits of their economy and their thrift.

The first initiative of this kind dates from 1909 and consisted in the building of hygienic and cheap houses for depositors in the Savings Bank of Santiago. This bank bought lots of land in various workmen's quarters in Santiago and began to build houses on a general plan, making allowance for the especial needs of each quarter. When the building was completed the bank proceeded to sell the houses to its depositors on the following terms: a cash payment of 25 per cent. of the value of the house at the time of entry into possession, and the payment of the balance — namely 75 per cent. — in monthly instalments usually spread over fifteen years and secured by a mortgage on the house.

In 1911 and 1912 eighty-eight cottages were thus built on four lots of land in the Huemul quarter: they represented a value of 1,106,000 pesos and were sold by the savings bank to its depositors. The results obtained in the Huemul quarter decided the council to continue this work, undertaking new building in the Nuñoa, Providencia, Arenida and Paz quarters.

For the group of dwellings constructed in the Huemul quarter the formation has recently been begun of an institution of public benefit which — according to the plan we have been able to inspect — will comprise a maternity home, a milk depot, a children's hospital, a children's home, a model *conventillo* (1), etc. This will certainly render valuable service to the many working-class families of the neighbourhood.

Another measure belonging to the same category was applied in 1909. In that year the administrative council decided to open a special branch of the Savings Bank of Santiago which should facilitate the purchase of land by its depositors. Special rules for the business of this section provide that when a depositor wishes to acquire a property he must appear before the administrative body of the bank and specify the terms on which an estate is offered to him. The bank then studies antecedents, examines titles, has the property valued, and buys it — paying the whole price in cash — if it deem the transaction to be to the advantage of the depositor. It then resells the property to him, he paying only a small sum in cash and the rest in monthly instalments which are graduated to cover a suffi-

(1) The *conventillos* are agglomerations of many small dwellings, usually more or less insanitary and uncomfortable, which are inhabited by the employees of farms.

ciently long period and comprise interest and amortization (1). Properties which are the object of these transactions must be free from all burdens. The section for the purchase of properties has thus, since it was constituted, sold more than 400 holdings in real estate of which the value is more than 7,000,000 pesos.

Finally, following the line of conduct adopted by the council and in the interest of small rural property, the bank decided in 1910 to buy an area of 232 hectares (2) which adjoined the station of the State railways at Graneros, in order to divide it and resell it in parcels, converted into small model farms or as bare land, and to adopt the procedure followed in the case of the properties of which we have already spoken.

Having noticed this enterprise of the savings banks which aims solely at procuring advantages for the rural working-class population, we will now speak of the colonist group called the "agricultural colony of Graneros". As has been said its land has an area of 232 hectares which were bought for 551,000 pesos. Seventeen hectares were at once resold to a purchaser who intended to instal a large establishment for the exercise of various rural industries and for giving advice to the colonists. The land remaining available — 215 hectares — has been divided into lots of about one hectare each which are still being sold. More than two thirds of them have been sold hitherto.

(1) The period is generally eleven years and seven months. The purchasers repay their debt according to the value of the property as follows:

Value of the Property	Sum to be paid	Monthly Instalments
pesos	in Cash	pesos
1,000	150	8.50
2,000	300	17.00
3,000	450	25.50
4,000	600	34.00
5,000	750	42.50
6,000	900	51.00
7,000	1,050	59.50
8,000	1,200	68.00
9,000	1,350	76.50
10,000	1,500	85.00
11,000	2,200	88.00
12,000	2,400	96.00
13,000	2,600	104.00
14,000	2,800	112.00
15,000	3,000	120.00
16,000	3,200	128.00
17,000	3,400	136.00
18,000	3,600	144.00
19,000	3,800	152.00
20,000	4,000	160.00

(2) 1 hectare = 2.47 acres.

This agricultural settlement places small farming properties within the reach of the rural proletariat. The colony is provided with large avenues, special plantations, an adequate system of irrigation, ditches for outflow and drainage, captations of underground waters, installations of drinking water and electric light, a farm school for practical instruction as to growing all crops, a chair of theoretical agriculture, model stables, etc.: — in a word all that contributes to the agricultural labourer's intellectual development and the improvement of his social position.

This colony has its special savings bank as have all those formed by the Chilian savings banks.

§ 4. NEW SERVICES OF THE BANKS ORGANIZED IN ACCORDANCE WITH THE RESOLUTION OF THE FIRST THRIFT CONFERENCE.

As we said at the beginning of this article a congress of representatives of all savings banks in Chile, called the First Thrift Conference, met at Santiago in December 1915. Its object was to study methods which would allow an even better response to public trust and esteem by a multiplication of the advantages provided by savings banks, and to intensify the propaganda of thrift as much as possible by giving it a uniform orientation.

Various new departments having such object were proposed and examined by the representatives of the savings banks. Some of them have been adopted and are now at work; others will soon become actual. We will attempt briefly to explain the principal of them.

In the first place the conference studied with much interest the formation of capital becoming due after a certain period and of old-age annuities, problems which are very important to social thrift; and it decided unanimously to constitute two services *ad hoc* in banks receiving deposits, in order to form a capital of savings and to constitute an annuity or pension falling due after a period. The *savings and annuity bonds* which fulfil these two objects were instituted on the initiative of the conference.

Before we examine these bonds we must state that they are non-transferable and, by the terms of the law, exempt from seizure.

They belong to two classes, according to whether the capital is formed by a single deposit or weekly deposits. In the former case they may fall due in five, ten, fifteen, twenty or twenty-five years according to the amount of the single deposit, as follows:

A) Basis $7\frac{1}{3}\%$ <i>annually</i> .		
Falling due after		Sum deposited
5.	pesos	695
10.	"	480
15.	"	330
20.	"	230
25.	"	160

When the sum corresponding to one of these five periods has been deposited the bank issues to the depositor a *savings bond* of 1,000 pesos, payable on the day on which it becomes due. If the depositor die before this date his heir can hold the bond for the remaining period or, if he prefer, can demand liquidation. In the latter case the bank will pay him the deposited sum, plus interest at the rate of 6 per cent. a year up to the day of liquidation.

The *savings bond constituted by weekly deposits* is issued like the preceding one, and is for 1000 pesos falling due after five, ten, fifteen, twenty or twenty-five years, the depositor being bound to pay the following sums half-yearly :

B) Basis : $6\frac{1}{2}\%$ annually.

Falling due after	Amount of weekly deposits	Total payments
5.	pesos 84	pesos 840
10.	35	700
15.	19.50	585
20.	12	480
25.	8	400

Six months after the payment of the last weekly deposit the bank will pay the depositor the amount of his bond, that is 1000 pesos.

If any person acquiring a bond of this description make his weekly deposits unpunctually he must pay interest for the period of delay at the rate of 10 per cent., and if the delay is for more than eighteen months the bank may liquidate the operation. In this case however it repays to the bearer of the bonds the sums he has deposited, plus interest at the rate of 6 per cent. up to the day of liquidation. If he die his heir may demand a liquidation or continue to make due payments. In either case the procedure is that applied where a savings bond constituted by a single deposit is concerned.

The annuity bond produces a fixed weekly sum for five, ten, fifteen, twenty or twenty-five years, in return for the deposit of a given sum which buys the bond, as is shown by the following table :

C) Basis $7\frac{1}{2}\%$.

Number of years for which the depositor receives the income	Single Deposit made by him	Half-yearly income paid to him by the bank	Total sum paid by the bank during the stipulated period
	pesos	pesos	pesos
5	820	100	1,000
10	1,390	100	2,000
15	1,785	100	3,000
20	2,055	100	4,000
25	2,245	100	5,000

The bank begins to pay the income six months after the deposit has been made. It is, like the savings bond, non-transferable and exempt by law from seizure.

An annuity bond can be bought so that the purchaser receives the income after a period of five, ten, fifteen, twenty or twenty-five years, instead of during one of these periods. The sum deposited of course varies considerably in each case, for it depends on the number of years which have to run before the bank has to begin to pay the rent and the number for which it is payable. The following table shows these variations:

D) Basis : $7 \frac{1}{2} \%$ for the formation of the capital and $6 \frac{1}{2} \%$ while the income is payable.

Single initial deposit	The bank after	Pays each week to the purchaser of the bond	For	Total sum paid by the bank
pesos	years	pesos	years	pesos
585	5	100	5	1,000
405	10			
280	15			
195	20			
135	25			
1,005	5	100	10	2,000
695	10			
480	15			
325	20			
230	25			
1,315	5	100	15	3,000
910	10			
630	15			
435	20			
300	25			
1,535	5	100	20	4,000
1,065	10			
735	15			
510	20			
355	25			
1,700	5	100	25	5,000
1,175	10			
810	15			
560	20			
590	25			

The new enterprises are seen to be exclusively enterprises of thrift aiming at no gain : the bonds representing them are based solely on compound interest.

It is easily understood that the new services will be of especial benefit to the working classes. A savings bond of 1000 pesos, the capital of which has been constituted by weekly payments for twenty years, requires a deposit of 12 pesos every six months, and may therefore be said to be within the reach of every workman, however humble, since it involves a saving of only 0.50 peso a week.

The other services organized on the basis of the research and deliberations of the First Thrift Conference, which will shortly become active if they are not so now, are : *a*) a system of cheques with special depositing forms ; *b*) special or privileged savings accounts ; *c*) safes, and *d*) the organization of a home service within the sphere of each central or branch office. The list of these services indicates their nature which has no particular interest for us. They will however give a certain elasticity to the mechanism of the savings banks where the most modern banking operations are concerned.

We will end these brief notes with the statement that the First Thrift Conference proved by figures and data the importance of the work accomplished by the Chilian savings banks. The figures we have reproduced show a constant and increasing rise in the curve representing the deposits received by this bank. It has been possible to utilize the savings for the increase of the wealth of the country and social progress. The workmen's dwellings, the purchase of rural properties, the formation of colonies of small proprietors, and the new services and commercial schemes show that the Chilian savings banks have left behind them their initial phase of hesitation and have succeeded in centralizing savings which will doubtless serve as a basis to the future economic development of the country.

URUGUAY.

MORTGAGE INSURANCE.

SOURCE :

BANCO DE SEGUROS DEL ESTADO. SEGURO HIPOTECARIO. (*Insurance Bank of the State. Mortgage Insurance*). Impr. Juan J. Dornaleche. Montevideo, 1916.

§ I. PRELIMINARY REMARKS.

The growing development in this country of long-term mortgage operations, thanks to the facilities afforded by the Mortgage Bank of Uruguay and other similar institutions, has given birth — among other enterprises of the State Bank of Insurance (1) — to a scheme for insurance which aims at providing for the payment by mortgagers, in the case of their death, of the interest and the amortization quotas which they have engaged to pay. In other words an attempt has been made to find a method of avoiding that the heirs of a mortgager, generally his wife and children, be in the sad necessity of having to give up the property they have inherited because they cannot continue to fulfil the mortgager's engagements; of avoiding, that is, that they inherit not a property but a debt which they cannot pay.

The State Bank of Insurance gave attention to the solution of this problem, which from the outset it considered to be in harmony with its mission as the chief agent of thrift in the economy and society of Uruguay, and was forced, in forming a basis for insurance of this type, to take different considerations into account. First such insurance should effectively correspond to the ends in view; secondly its tariff should be so low that the payment of the premium does not involve a sacrifice for those paying it; thirdly the terms should be brought into line with the system of granting financial facilities otherwise followed by the bank; and fourthly the delay before premiums are paid should be as short as possible.

In order to understand the insurance of mortgage debts we will take a concrete example.

A married man, twenty-five years old, having limited pecuniary resources, buys a property worth 3,000 pesos (2) but has only 1,500 pesos at

(1) For the organization and operations of the State Bank of Insurance, see our issue for March 1917, page 35.

(2) 1 peso = 4.283 s. at par.

his disposal. He mortgages the property he has bought for the remaining 1,500 pesos, the loan being repayable in thirty years.

During his lifetime he pays the fixed annual instalments punctually, but after six years he dies. In the course of his life he has amortized 130.56 pesos which is to say that at his death he still owes 1369.44 pesos. Can his family still fulfil the obligation of the mortgage, namely make an annual payment of 123.38 pesos for the twenty-four years which have still to run before the obligation is cancelled? There would not be this doubt if the individual in question had guarded against the eventuality of his early death by insuring his mortgage, in the manner which we will explain, at the same time as he mortgaged his property. The Insurance Bank would in this case have issued a policy by which it engaged to pay, to the heir or heirs named therein, a sum equal to that needed by the terms of the mortgage to pay the debt remaining a burden on the property from the time of the mortgager's death until the conclusion of the term of the mortgage.

Further it is an essential condition of the mortgage in question that the obligation assumed by the bank remain valid in spite of any delay of the payments by the mortgager to the mortgagee, and in spite of payments in advance which he may have made or his sale of the mortgaged property. Thus the bank's engagement subsists for the period of thirty years and its effectiveness cannot in any way be lessened within this period. The insurance is therefore essentially a life insurance lasting for thirty years, in virtue of which — in relation to the mortgage which gave it birth — the bank must pay to the heirs of the insured person, if he die within the thirty years and whether or not he has repaid the mortgage debt or sold the property, the amount of the annual payments still pending at the time of his death. In other words if the mortgager die after six years of insurance, as we assumed previously, his heirs receive the sum of 1369.44 pesos even if he have repaid his debt or sold his property.

The costs accompanying this form of insurance are low, as is shown by the tariff which we give below, and they vary with the amount of the debt and the age of the borrower. In the case already cited the mortgager in order to insure his debt would have to pay one premium of 91.76 pesos or the following annual sums :

1st. year	33.63	pesos
2nd "	26.91	"
3rd. "	20.19	"
4th. "	13.47	"
5th. "	6.75	"

§ 2. TERMS OF INSURANCE.

The following are the principal terms of the policy :

a) This contract is in force from the time of the payment of the single premium or the first of the five annual instalments into which, if the contracting person wish, this single premium can be divided.

If the insured person die before five years have passed from the time at which the contract comes to have force, the bank will deduct, from the amount to be paid, the portion of the premium which still has to be paid before the total sum of the single premium is reached.

b) Only long-term mortgages, constituted in conformity with the by-laws of the Mortgage Bank of Uruguay or other similar organizations, can be the objects of this insurance.

c) If it be discovered at any time that the true age of the insured person is less than his age as declared in the application which was the basis of his policy, and if his true age be more than fifty or the difference between his declared and his true age be more than five years, the insurance will be null and void and the bank will not be obliged to repay the paid premium. The insured person or his heirs must prove his age as often as the bank desire.

d) The policy makes no restrictions as to travelling and place of residence ; but the insured person must not blow up rocks, engage in mining or diving or the manufacture of inflammable or explosive substances, or make aerial ascents without first notifying the bank and obtaining its consent, and causing the bank to establish that the premium shall still be recoverable and the policy remain in force. In default of such declaration, and in the case of an accident due to the causes here cited, the insurance will be null and void, and the insured person or his heirs will be able to claim no part of the amount of premium paid.

e) Military service within the country or for its defence entails no increase of the premium ; but military service for a foreign nation annuls the insurance so that the insured person or his heirs can claim no part of the premium paid.

f) In the case of suicide the insurance is annulled and the bank repays the premium or the annual payments it has received.

g) When the proofs of the death of the insured person have been presented and the bank has accepted them, the bank will, according to circumstances, pay or credit the sum due.

h) The policy will be annulled if the contracting person omit to pay, when it falls due, any one of the annual instalments forming an integral part of the single premium on which the contract is based.

We give below the tariff fixed by the bank for the insurance of mortgage debts :

Amount of the Premium for 1000 pesos insured for 30 years.

Age of debtor	Single premium in pesos	Premium paid by annual instalments in pesos					
		First	Second	Third	Fourth	Fifth	Total of instalments
years							
25	60.17	22.42	17.94	13.46	8.98	4.50	67.30
26	64.39	23.60	18.88	14.16	9.44	4.72	70.80
27	67.61	24.80	19.80	14.90	9.90	4.97	74.37
28	70.83	25.97	20.78	14.59	10.40	5.21	77.95
29	74.05	27.15	21.72	16.29	10.86	5.43	81.45
30	77.28	28.33	22.64	16.98	11.32	5.69	84.96
31	80.70	29.59	23.64	17.73	11.82	5.95	88.73
32	84.13	30.86	24.64	18.48	12.32	6.20	92.50
33	87.56	32.11	25.68	19.26	12.84	6.42	96.31
34	90.99	33.36	26.68	20.01	13.34	6.68	100.07
35	94.44	34.62	27.68	20.76	13.84	6.94	103.84
36	101.94	37.39	29.88	22.41	14.94	7.49	112.11
37	109.45	40.13	32.08	24.06	16.04	8.05	120.36
38	115.96	42.51	34.00	25.50	17.00	8.51	127.52
39	124.43	45.63	36.48	27.36	18.24	9.15	136.86
40	131.98	48.39	38.68	29.01	19.34	9.71	145.13
41	140.35	51.46	41.16	30.87	20.58	10.30	154.37
42	148.72	54.53	43.60	32.70	21.80	10.93	163.56
43	157.09	57.61	46.04	34.53	23.02	11.55	172.55
44	165.46	60.68	48.52	36.39	24.26	12.14	181.99
45	173.85	63.75	50.91	38.22	25.48	12.78	191.19

From all that has been said it is easy to understand the importance of this form of insurance to the rural population of a colonists' country like Uruguay where mortgage credit plays so large a role.

Part III: Credit

UNITED STATES.

FEDERAL BANKS AND FINANCIAL ORGANIZATION.

OFFICIAL SOURCES:

AN ACT TO PROVIDE FOR THE ESTABLISHMENT OF FEDERAL RESERVE BANKS, TO FURNISH AN ELASTIC CURRENCY, TO AFFORD MEANS OF REDISCOUNTING COMMERCIAL PAPER, TO ESTABLISH A MORE EFFECTIVE SUPERVISION OF BANKING IN THE UNITED STATES, AND FOR OTHER PURPOSES. Approved 23 December 1913. Public, N° 43, 63 D Congress.

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AN ACT TO AMEND CERTAIN SECTIONS OF THE ACT ENTITLED "FEDERAL RESERVE ACT" APPROVED 23 DECEMBER 1913. Approved 7 September 1916. Public, No. 270, H. R. 13391, 64th Congress.

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THE JOURNAL OF POLITICAL ECONOMY, Vol. XXIV, N° 10., Chicago, December 1916.

Financial and banking organization in the United States, certain defects of which were repeatedly pointed out by financial experts and economists and were thrown into relief by the crisis of 1907, has undergone in recent years a significant transformation.

Recurrent and multiplied attempts, and also numerous failures, pro-

found study and the resultant minute knowledge of the country's real needs and political necessities, seem at last to have led the government of the States to institute a new organization of banking, grafted on the surviving trading organization and aiming at providing remedies for the crises which may eventually threaten the equilibrium of the money market.

The law of 23 December 1913, which created the Federal Reserve Banks, gives its bases to the new system and is modified and amplified by a law of 7 September 1916, which is connected at several points with the law on agricultural credit of 17 July 1916.

The new organization represents, as we shall show in examining its outstanding features, a measured compromise between two political and economic principles — complete centralization and localization — which in turn have left their mark on the law and administration of the North American republic since first it was formed, and which the force of experience and of a union of social forces tend more and more to merge.

In order justly to appreciate the reforms introduced into the monetary and banking system of the States by the Federal Reserve Act, and the possibilities of economic growth which the new system offers to the various States, we must realize the successive stages through which American finance has passed, and — maintaining a balance amongst fluctuating opinions — arrive at the equilibrium established by one or more of the regulating institutions.

§ I. GENERAL VIEW OF THE DEVELOPMENT OF THE FINANCIAL SYSTEM OF THE UNITED STATES.

a) *The Two First Federal Banks.*

After the first confused and precarious years of provisional measures and multifarious difficulty Congress had to consider the national credit's lack of stability. In the revolutionary period three institutions had been founded — the Bank of North America, the Bank of New York in 1781 and the Massachusetts Bank in 1784. Alexander Hamilton, first secretary of the Treasury, considered that they did not suffice and proposed to form a federal bank. In support of his proposal he argued 1) that capital would thus become available because the trust circulation would increase, 2) that the government would be able to borrow more easily, and 3) that the citizens would be able to pay taxes more easily, because they would have less difficulty in procuring credit, which would lead to a larger and more rapid circulation of money. After various discussions Congress finally approved the formation of the proposed bank, and it was constituted in 1791 under the name of Bank of the United States, with a capital of \$10,000,000 of which one fifth was to be subscribed by the government and the rest by the public. The offices were at Philadelphia. This was the first federal bank. It did good service to the government but aroused the opposition of the anti-federalist or republican party which under Jefferson soon rose to power and did not renew the privilege which

had been granted for twenty years. The Bank of the United States therefore went into liquidation in 1811. The interests of the State Banks were not without influence on such outcome. These banks had numbered three in 1790 but in 1800 there were eighteen of them and their capital amounted to \$21,300,000, while in 1811 they were eighty-eight and had a capital of \$42,600,000.

The State funds had therefore again to be entrusted to the local banks. But after the second War of Independence (1812-1814) and during Monroe's presidency Congress submitted to necessity and consented in 1816 to the creation of a second Bank of the United States. Its capital was fixed at \$35,000,000 which sum limited its circulation. Of this capital the government subscribed \$7,000,000 in specie, and three fourths of the balance — namely \$28,000,000 were subscribed in the funded debt of the State. Five of the twenty-five directors were appointed by the president. The bank was obliged to transfer the public funds of the government from place to place without commission. In return for the privileges granted in the charter the bank was obliged to pay \$1,500,000 in three equal instalments to the United States, and the United States undertook to establish no other bank under federal charter except in the District of Columbia. Congress was given the power to inspect the books of the bank. The new bank like its predecessor encountered political difficulties: in 1836 it failed to secure a renewal of its corporate powers under a federal charter and its interest as a fiscal institution of national importance ceased. A strong political party supported President Jackson in the opposition to the bank which led to its fall. State banks were subsequently carefully selected to hold the funds of the government, stringent conditions being imposed as to securities. But frenzied speculation in land in the Western States led President Van Buren in 1837 to call an extra session of Congress. He reviewed the situation and proposed to establish an independent treasury system through which the government might in the future care for its own funds. The system involved the institution of centres of deposit and sub-treasuries: established at this time, it was afterwards repealed but in 1846 it was definitely adopted. The principal centres of deposit were at New York, Philadelphia, Washington, Charlestown, New Orleans and St. Louis. The chief advantages of the system were that it created a new demand for specie, limited the expansion of bank paper money, avoided the disturbance of business following on government association with banks, prevented losses to the government, and gave to the Treasury a constant control of its funds. These advantages were realized during the panic of 1857, when the national government was able to meet all its liabilities although the State governments were gravely embarrassed.

The system of sub-treasuries is still in force but has been amended to allow surplus funds to be deposited in the National Banks.

b) *The State Banks and the National Banks.*

On 1 January 1862 there were in the United States 1496 banks issuing circulating notes, possessing an aggregate capital of \$420,000,000 and

carrying a circulation of \$184,000,000. " They were established under the laws of twenty-nine different States; they were granted different privileges, subjected to different restrictions, and their circulation was based on a great variety of securities, of different qualities and quantities. In some States the bill-holder was secured by the daily redemption of notes in the principal city; in others by the pledge of State stocks; and in others by coin reserves. There were State banks with branches, independent banks, free banks, banks organized under a general law, and banks with special charters. " " In New York ", adds Professor Dewey in his *Financial History of the United States*, " there were banks incorporated by special act, individual banks, and banks organized under the free banking law (1); in Louisiana there were chartered banks and free banks; in Ohio independent banks, free banks and a State bank with numerous branches; in Indiana a State bank with branches, and free banks; in Massachusetts banks under special charters and banks organized under a general law. In some States there were boards of bank commissioners who made frequent and thorough examinations, while in others no such boards existed or existed only in name; in a few States the public was informed as to the condition of the banks by the publication of periodical statements, but as a rule publicity was not insisted on ".

In only nine of the States did the law require the circulation to be secured by State bonds, and the State securities pledged for the notes were only \$40,000,000, leaving over \$120,000,000 provided for by other assets, sometimes by none. All told, about 7,000 different kinds of notes circulated, to say nothing of about 5,500 varieties of fraudulent notes.

Further the Treasury issued legal tender notes (greenbacks) to the value of several hundred million dollars, guaranteed by the public credit and constituting a forced currency, which greatly lowered the rate of exchange; and several loans were only partially subscribed. Such was the situation with which Salmon Chase found himself faced in 1863. He had to solve two problems — to create an organization which could absorb the loans the government had been forced to issue during the War of Secession and to purify the credit circulation by forming national agencies for the issue of notes. The desired agencies were the National Banks, which were differentiated from the State banks because a federal law allowed their foundation in any territory of the Union, and because they could issue notes, secured by a pledge of United States stock, which were legal tender (2).

(1) The Free Banking Act of 1838 guaranteed the trust circulation and the inspection of banks, and superseded the Safety Banking Act, the drawbacks to which had been revealed in 1837.

(2) " The origin of the national banking system is probably to be found in the germ from which sprang the establishment in 1838 in the State of New York of a set of local banks, having the power to emit a currency secured by the deposit of State bonds. The success of this plan suggested that a uniform national currency might in the same way be provided through the emissions of special associations, which should secure their notes by the pledge of government securities ". *The Origin of the National Banking System*. p. 7.

According to the law a banking association upon depositing bonds with the treasurer of the United States could receive circulating notes to the amount of 90 per cent. of the current market value of the bonds deposited — not exceeding however 90 per cent. of the par value. The amount of notes to be issued was originally limited to \$300,000,000, to be apportioned to banks in the different States according to population and existing banking conditions and necessities. The system was to be supervised by a bureau of currency in the Treasury department.

§ 2. THE CAUSES OF THE REFORM OF 1915.

Under the Act of 1900 a national bank could be organized with a capital of \$ 25,000 (1) in a town with a population not exceeding 3,000. Circulation was increased to the full face value of bonds deposited so long as they stood at par or above par. The number of national banks increased from 3,595, in 1899 to 7,301 in 1911. The extension of the national system was especially rapid in the South and West on account of the reduction in the stipulation as to minimum capitalization. State and private banks were converted into national institutions and many new banks were organized, nearly one half of the new organizations having a capital of only \$25,000. The circulation nearly trebled between 1900 and 1911, increasing from \$254,000,000 to \$739,000,000, or by an annual average amount of more than \$40,000,000. The inflation was steady. A further consequence of the extension of the national system was the absorption by national banks of federal bonds. In 1900 these banks owned \$ 245,000,000 of United States bonds; in 1911 they owned \$ 714,000,000 or three fourths of the total interest-bearing debt. Matters standing thus it was evident that any reduction of the federal bonds in circulation would reduce the facilities for credit — a result which might be useful or even necessary but only if commercial conditions were taken into account. The enquiry by the National Monetary Commission, with which we will deal presently, made clear the fact that the mechanism of the national banks does not move simultaneously with the fluctuations of trade. "In a country now agricultural like the United States", says M. Auguste Moireau, "it is at harvest-time, when corn begins to reach the market, that the need for capital is most apparent. Specie and notes are drained from New York to the interior, rates of interest and discount rise rapidly. In harvest time — the height of the summer — a far larger circulation is needed than in the beginning of spring, owing to the larger sum which must be paid in wages in the former season. A system of issue which does not easily meet the seasonal demands of agriculture and trade renders the country liable to grave economic disturbance. If the circulation be insufficient at the time of harvest the metal reserves of the urban banks are emptied or at least markedly reduced, and their credit capacity is proportionately dimi-

(1) The minimum capital had hitherto been \$50,000.

nished. If on the other hand the circulation be too large in the intermediate period and cannot be automatically absorbed by the issuing establishments, there is a useless accumulation of money in the towns and speculation or the export abroad of gold is encouraged... The organization of the national banks did not allow them to restrict their circulation in periods of stagnation or enlarge it in periods of activity. The absence of this ability to contract and expand gave them the inelasticity for which the system of credit circulation in the United States was so often blamed."

The National Monetary Commission found that since the circulation under this system depended on the amount of the Federal bonds pledged, the following state of affairs is produced: in years of development and intense agricultural and commercial activity, in which paper circulation should increase, public receipts are likewise augmented, and in a country like the United States in which operations are on an enormous scale receipts rapidly come to exceed expenditure. With the available excess the government reduces the debt, that is reduces the amount of the bonds, and this entails a diminution of the circulation which is opposed to what ought to be. In this way between 1883 and 1891 the circulation was lowered by 53 per cent., with especial rapidity in the autumn of 1886 and 1888, the demand for bank notes being emphasized in that season. The danger of this procedure is more apparent if it be remembered that in the same period the demand for money for trade rose by 54 per cent. After 1893 the contrary case appeared. The restriction of business ought to have been reproduced in a contraction of the circulation.

The State's redemption of bonds ceased, owing to the budget's deficit, and a new issue of State bonds was even necessary, so that the circulation was enlarged. Finally the crisis of 1907 proved once more that the mechanism of the National Banks was not adequate to the country's need.

As early as 1906 there had been agitation for the reform of the banking system, essentially with a view to giving the circulation the elasticity it lacked. The Association of American Bankers and the New York Chamber of Commerce elaborated schemes. Making allowance for differences of detail these schemes proposed to grant to the national banks the power to issue bills secured by federal debt bonds, and other bills differently secured, and to abolish all restriction on the withdrawal of issued bills. In 1907 Congress merely raised from \$3,000,000 to \$9,000,000 the amount of the bank notes which could be withdrawn from circulation every month. The crisis of this year showed clearly the urgent need for a change in the financial system. While the question was being examined provisional measures were taken, pending a complete solution. In 1908 the Vreeland-Aldrich Act provided that when money was tight the National Banks could issue emergency notes up to the value of \$500,000,000. These notes would have only a temporary circulation and could be secured by American government or municipal bonds or commercial paper.

Simultaneously Congress decreed that there should be a National Monetary Commission, charged to examine the financial and banking situation in all its aspects in the United States and in the principal European

countries and to report its conclusions. The results obtained by this commission were first published at the end of 1910 (1). They noted various weaknesses which have been mentioned and favoured a greater centralization of the banking system. The Commission did not however propose the establishment of a single federal bank on the model of the great national banks of Europe, but the creation of a Reserve Association of America which would have the necessary authority and means to increase and reduce the volume of paper money in circulation as circumstances demanded. It was hoped that both the Federalist party and their opponents would approve this expedient.

Congress on 23 December 1913 voted the Act creating the Federal Reserve, in accordance with the principles and the hopes which the commission had enunciated.

§ 3. THE FEDERAL RESERVE ACT.

We will now briefly analyse the law entitled "An Act to provide for the establishment of Federal reserve banks, to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes".

Section 2 rules that as soon as practicable the secretary of the Treasury, the Secretary of Agriculture and the Comptroller of the Currency, acting as "The Reserve Bank Organization Committee, shall designate not less than eight nor more than twelve cities to be known as Federal reserve cities, and shall divide the continental United States, excluding Alaska, into districts, each district to contain only one of such Federal reserve cities... Such districts may be designated by a number... The said committee shall supervise the organization in each of the cities designated of a Federal reserve bank... Every national banking association in the United States is hereby required, and every eligible bank in the United States and every trust company within the District of Columbia is hereby authorized, to signify in writing, within sixty days after the passage of this Act, its acceptance of the terms and provisions hereof. When the organization committee shall have designated the cities in which Federal reserve banks are to be organized, and fixed the geographical limits of the Federal reserve districts, every national banking association within that district

(1) In 1909 the commission had indeed published a special report on the banks of the United States. Its data concerned 22,491 of some 25,000 banks existing in the States on 28 April 1909. The banks as to which there was no precise information confined their business for the most part to brokerage and exchange.

The capital stock of the 22,491 reporting banks of all classes amounted to \$1,800,036,368 and their resources aggregated \$21,095,054,420.72. Banks to the number of 18,245 submitted supplementary statements, showing deposits aggregating \$13,595,599,850.66 to the credit of 25,645,604 depositors (deposit accounts), including \$5,678,735,379.65 savings and time deposits, with 14,894,696 depositors.

shall be required within thirty days after notice from the organization committee, to subscribe to the capital stock of such Federal reserve bank in a sum equal to six per centum of the paid-up capital stock (1) and surplus of such bank, one sixth of the subscription to be payable on call of the organization committee or of the Federal Reserve Board, one sixth within three months and one sixth within six months thereafter, and the remainder of the subscription or any part thereof shall be subject to call when deemed necessary by the Federal Reserve Board, said payments to be in gold or gold certificates... Any national bank failing to signify its acceptance of the terms of this Act within the sixty days aforesaid shall cease to act as a reserve agent, upon thirty days' notice, to be given within the discretion of the said organization committee or of the Federal Reserve Board. Should any national banking association in the United States now organized fail within one year after the passage of this Act to become a member bank or fail to comply with any of the provisions of this Act applicable thereto, all of the rights, privileges and franchises of such association granted to it under the national bank Act (1863) or under the provisions of this Act shall be thereby forfeited... Should the total subscriptions by banks and the public to the said Federal reserve banks or any one or more of them be, in the judgement of the organization committee, insufficient to provide the amount of capital required therefor, then that committee shall allot to the United States such an amount of said stock as said committee shall determine... No Federal reserve bank shall commence business with a subscribed capital less than \$4,000,000 ''.

Each Federal Reserve Bank is under the supervision and control of a board of nine directors, of whom three represent and are chosen by the stockholding banks, three must when elected be actively engaged in their district in commerce, agriculture or other industrial pursuit, and three are nominated by the Federal Reserve Board. The chairman of the board of directors is chosen by the Federal Reserve Board from the last named three, and also has the office of federal reserve agent, acting as official representative of the Federal Reserve Board for the performance of the functions conferred on it by the Act.

Any bank incorporated by special law of any State, or organized under the general laws of any State or of the United States, may apply for the right to subscribe to the stock of the Federal Reserve Bank organized or to be organized within the Federal Reserve District in which it is situated. If such application be accepted the applicant bank must conform to the regulations as to reserves and capital and inspections which the Organization Committee or the Federal Reserve Board establish. No bank may thus subscribe to the stock of a Federal Reserve bank if it have not unimpaired paid-up capital sufficient to allow it to become a National Bank within its own locality in accordance with the law regulating such banks. When admitted it shall be subject to all laws applicable to National Banks. A dividend up to 6 per cent. on paid-up capital shares may be distrib-

(1) The shares are of \$100.

uted to stockholders out of the net profits of the Federal Reserve Bank. Half the surplus profits shall be paid to the government of the United States and the other shall constitute a special reserve fund. When the latter has reached an amount equal to 40 per cent. of the bank's paid up capital the whole balance will return to the government.

The property of Federal Reserve Banks, — including their capital shares, their reserves and all their revenue, is exempt from all taxation of the United States Government or the States or other authority, except the land tax.

When the Organization Committee has accomplished its task it gives place to the Federal Reserve Board which meets in Washington and is the motive power of the whole system. It has seven members, namely the Secretary of the Treasury and the Comptroller of the Currency who are members *ex officio*, and five others appointed to hold office for ten years by the President of the United States with the consent of the Senate. In appointing them the President has due regard to a fair representation of the different commercial, industrial and geographical divisions of the country, and he designates one of them as governor and one as vice-governor of the Federal Reserve Board, the former being the board's active executive officer.

The Act also creates a Federal Advisory Council, consisting of as many members as there are Federal Reserve Districts, each Federal Reserve Bank sending a representative to it. This council meets at least four times a year: it confers directly with the Federal Reserve Board on general business conditions; it makes oral or written representations concerning matters within the jurisdiction of this board; and it calls for information and makes recommendations in regard to discount rates, rediscount business, note issues, reserve conditions in the various districts, the purchase and sale of gold or securities by reserve banks, open market operations by these banks, and the general affairs of the reserve banking system.

Previously National Banks were obliged to have a reserve equal to 25 per cent. of the amount of their deposits in the reserve towns and 15 per cent. in the other towns; but the Act of 1913 made this percentage 18 in New York, Chicago and St. Louis, 15 in other reserve towns, and 12 in non-reserve towns. The excesses of available reserves should be transferred in accordance with certain conditions to the Federal Reserve Bank.

For twenty years from 1915 the member banks of a Federal Reserve Bank may apply to sell all or some of their circulating notes which they desire to retire.

The Federal Reserve Board will decide on such applications. A Federal Reserve Bank may not purchase more than \$25,000,000 of such bonds in a year.

Upon depositing with the Treasurer of the United States bonds so purchased, or any bonds with the circulating privilege acquired under this Act, any Federal Reserve Bank shall receive from the Comptroller of the Currency circulating notes in blank equal in amount to the par value of the deposited bonds. Such notes shall be issued and redeemed on the

same terms and conditions as National Bank notes, except that they shall not be limited to the amount of the capital stock of the Federal Reserve Bank issuing them. Thus the circulation of notes will eventually be appreciably simplified and unified.

The law perfects the machinery for controlling the banks. In addition to the inspections by the Comptroller of the Currency, inspections of any bank by the Federal Reserve Bank of its district can be authorized by the Federal Reserve Board. The Federal Reserve Banks are themselves inspected annually and their member banks can obtain that they be inspected specially.

As regards the special interests of agriculture — every National Bank not situated in a central reserve town may make loans on cultivated, unmortgaged land within its district, for a term of no more than five years, of amounts not exceeding 50 per cent. of the value of the property offered as security. Each of these banks may thus lend as much as 25 per cent. of its capital and reserves or one third of its term deposits and continue as previously to receive term deposits and pay interest on them.

The Federal Reserve Board will have the right to add other towns from time to time to the list of those in which the National Banks may not thus grant loans secured by landed property.

Federal Reserve Banks within the territory of the United States do no business with the public directly but only with each other and with the National Banks. Their deposits emanate only from their stockholders and the government of the United States. By means of the notes they issue they may rediscount the commercial paper of their respective National Banks and discount the notes and acceptances of foreign banks. They may open branches abroad which may transact all normal banking business directly.

Both abroad and at home these banks are the government's fiscal agents, and as such recover taxes and duties, pay arrears of the public debt, etc.

§ 4. THE WORKING OF THE FEDERAL RESERVE BANKS.

As soon as the Act had been passed the organization committee got to work. Its first difficulty was to fix the number of the districts in which there should be banks, for the interests of the different States could not be neglected.

It was decided that there should be twelve districts, and that the banks should have their sites in Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, Kansas City, Dallas and San Francisco. The notice provided by the Act was given to the various banks and on 18 May the decree for the organization of the Federal Reserve Banks was drawn up. The banks of each district were then divided into three equal groups, according to the amount of capital and property they held. At the beginning of July 1914 each group in the

various districts elected two directors of a Federal Reserve Bank. This somewhat complicated procedure allows the small banks to be represented on the directors' boards of their respective Federal Reserve Banks.

The election ended the task of the organization Committee and on 10 August the Federal Reserve Board was sworn in. It comprises in addition to its statutory members an expert in foreign banking and investing, a Southern banker, a jurist, an economist, and a railway expert. It had first to nominate the three representatives of the government in the directors' boards of the Federal Reserve Bank. Meanwhile the interior organization of the banks was studied by a technical committee. It was judged well to divide the powers of the boards of directors into two. The chairman, appointed by the Federal Reserve Board from the three official representatives, is this board's intermediary as regards the direction and superintendence of the business of a bank, and the governor — whom the directors appoint from their own number — is the effective president. The directors have been well chosen for their financial capabilities and have greatly ministered to the scheme's development. Each Federal Reserve Bank is largely an independent institution, managed by local persons. Its officials and directors can speak with authority for the different local interests they represent.

The opinions of the governors, supported by their boards of directors and amplified by the Federal Advisory Council, have had much weight in this first period of the activity of the new banking machinery.

In October 1914 the work of organization was far from complete, but in view of the conditions created by the European war it was thought well not to defer the opening of the banks. The opening day was fixed for 16 November and the first payment of capital was made on 1 November. Of the 7,493 National Banks which were active only eighteen refused their subscription. The first contribution was slightly over \$18,000,000; and the aggregate nominal capital was about \$106,800,000, that is slightly less than \$14,000 for each stockholding bank. Succeeding payments were made on 1 February and 1 May 1915. The other half of the subscribed capital stock will probably not be called for so soon. In June 1916 the paid-up capital amounted to \$54,864,000.

In addition the Federal Reserve Banks disposed on the opening day of the part of the reserves of the stockholding banks which was to be transferred to them under the Act. The banks of the central reserve towns thus transferred a sum equal to 7 per cent. of the deposits they held, the banks of reserve towns made a preliminary deposit of 3 per cent. and the others one of 2 per cent. (1). The Federal Reserve Banks also received at one time about \$230,000,000, which with the first payment of capital brought their available funds up to about \$250,000,000. These transferences were made quite easily and conveniently.

(1) The deposits of the two latter were completed on 16 November 1915 and 16 May and 16 November 1916, and their transferred reserves thus came to be 6 and 5 per cent., respectively.

The Act provided that the rediscount of the paper of stockholding banks should in normal times constitute a Federal Bank's chief business. The rate of such discount was first fixed at from $5\frac{1}{2}$ to $6\frac{1}{2}$ per cent., according to the term of the bills. But as the Act had lowered the minimum necessary reserve of the National Banks, these disposed of large sums which they previously could not touch and were therefore able to extend their business without rediscounting their paper. Thus the available reserve of the National Banks of New York rose from \$ 85,000,000. From being tight money became plentiful; the Reserve Banks had to meet no demand for rediscount except in the three Southern districts; and at the end of 1914 the rate was brought to $4\frac{1}{2}$ and 5 per cent. At this time the whole rediscount business reached the sum of \$10,593,000, of which \$4,027,000 belonged to the Southern districts. The rate of rediscount was lowered to 4 per cent. in 1915; and at the end of this year the whole rediscount business figured as \$32,000,000, of which sum 74 per cent. belonged to the Southern banks. On 17 June 1916 this sum had been reduced to \$20,425,000, \$13,307,000 belonging to the Southern banks. It is however probable that when the abnormal conditions created by the war are at an end, that is when the large facilities for credit offered in consequence of the great influx of gold into the United States are no more, rediscounting by the Federal Reserve Banks will be more important.

The unimportance of this branch of business is not due to the nature of the paper to be discounted. Under the Act the Reserve Banks may only rediscount bills representing loans for commercial purposes; but the adjective is given a large interpretation, for all advances of funds repayable within ninety days, and made by a bank to a borrower whose current assets are in excess of his liabilities, are considered to be commercial loans.

Agricultural paper and bills given for loans on cattle are given a preference in that they may be rediscounted even if their term be six months. A large part of the rediscounting done by the Reserve Banks has concerned paper of this description. Thus on 17 June 1916 63 per cent. of the loans granted by the Bank of Minneapolis were of this kind, as were 36 per cent. of those of the Bank of Dallas and about 23 per cent. of those of the Banks of Kansas City and Chicago.

Rediscounting is naturally active only in districts in which ordinary credit facilities do not suffice. The three Reserve Banks of the South appear consequently likely to be able to employ considerable sums in business of this kind.

The Act supplies another means of investment to the Federal Reserve Banks. They may buy in the open market bonds of the United States, bonds of the various States and municipal bonds at six months, and also bills of exchange arising out of commercial transactions. On 17 June 1916 they held United States bonds for \$59,000,000. Of municipal bonds, which are far less liquid, they then held \$22,300,000 and had at an earlier date held \$40,000,000.

The Act authorizes them to purchase and discount bills of exchange

arising out of home trade, a form of paper which both the legislature and the Federal Reserve Board prefer unhesitatingly to simple bills payable on order, whether these have only one signature or are endorsed by the signatory's bank. But since commercial acceptances of this kind are few in number, business of this kind has hitherto been insignificant. Banking acceptances have on the other hand been most important. The development of these transactions is due above all to the rapidity with which the Federal Reserve Banks have bought such acceptances at a moderate rate. In February 1915 the rate oscillated from 2 to 4 per cent. but most purchases were made at $2\frac{1}{4}$ and $2\frac{3}{4}$ per cent. They comprise a large quantity of foreign paper for which the normal market is London. At the date mentioned their total amount was \$64,953,000. All the Reserve Banks except that at Dallas, had part in them; but they were chiefly undertaken by the banks of New York, Philadelphia and Boston.

On 10 November 1916 the liabilities of the Federal Banks amounted to \$650,000,000, represented as to one tenth by the paid-up capital stock and as to nine tenths by the deposits of stockholding banks. Their own bills have hitherto circulated little, circumstances not rendering them necessities. Their assets amounted to \$400,000,000 in gold, \$110,000,000 in paper, a certain quantity of their bills, and accounts with neighbouring banks.

The unification which the federal reserve system was designed to effect was shown first by the adoption of a method of weekly settlements of accounts among the various federal banks, the difference between the debit and credit sides of such accounts being rectified by a remittance of specie or bills. The displacement of assets from one district to another is thus reduced to the minimum. In the second place since 15 June 1916 the recovery without charge of cheques and bills has been enforced by the Federal Reserve Board. Every stockholding bank now sends to its Reserve Bank its cheques and bills on other stockholding banks — who are bound to pay them without deduction — and also on other banks which have accepted this condition. The number of the establishments outside the sphere of the Reserve Banks which already practised this method was very considerable. This system may be considered to be almost general. A commission which strictly covers the costs is charged on each transaction. The procedure is expected to strengthen the banking machinery of the whole country, and to place it in this particular under the control of the Federal Reserve Banks.

The attraction of the new financial organization seems not yet to have been fully felt by the State and other banks, of which only some have become stock holders of the Reserve Banks, either transforming themselves into National Banks or keeping their particular charters.

It should be mentioned that most of the Federal Reserve Banks in their first year of activity did not succeed in realizing sufficient profits to cover their costs and distribute the anticipated dividend of 6 per cent.; but these initial difficulties are disappearing.

§ 5. MODIFICATIONS UNDER THE ACT OF 1916.

On the seventh of last December Congress passed an Act modifying that of 1916 in several respects with a view to amplifying its scope.

Certain of these modifications were proposed by the Federal Reserve Board in its last report.

The innovations aimed at making the federal reserve system more attractive, that is to say more profitable, to the stockholding banks, and at extending the scope and usefulness of the Federal Reserve Banks.

In abolishing restrictions on the acceptance by stockholding banks of bills of exchange of home origin which are sufficiently guaranteed the Act has placed within their reach a considerable source of profit, and has at the same time provided a new means of credit to the agricultural, industrial and commercial world; for notes, drafts and bills of exchange secured by agricultural products and other goods and merchandise can be thus discounted. Agricultural paper maturing in six months at most may be discounted up to an amount equivalent to a percentage of the Federal Bank's assets determined by the Federal Reserve Board.

Banks in districts having no more than 5,000 inhabitants are authorized to act as agents of insurance companies and agents for transactions of land credit, and are thus enabled to undertake two kinds of lucrative business.

As regards land credit, the article of the earlier Act to which we have referred is modified as follows: "Any national banking association not situated in a central reserve city may make loans secured by improved and unencumbered farm land situated within its Federal reserve district or within a radius of one hundred miles of the place in which such bank is located, irrespective of district lines, and may also make loans secured by improved and unencumbered real estate within one hundred miles of the place in which such bank is located, irrespective of district lines; but no loan made upon the security of such farm land shall be made for a longer time than five years, and no loan made upon the security of such real estate as distinguished from farm land shall be made for a longer time than one year, nor shall the amount of any such loan, whether upon such farm land or upon such real estate, exceed fifty per centum of the actual value of the property offered as security. Any such bank may make such loans, whether secured by such farm land or such real estate, in an aggregate sum equal to twenty-five per centum of its capital and surplus or to one third of its time deposits and such banks may continue hereafter as heretofore to receive time deposits and to pay interest on the same".

The Act increases the power of the Federal Reserve Banks in that it allows the Federal Reserve Board to authorize "member banks to carry in the Federal reserve banks of their respective districts any portion of the reserves" previously required to be held in their own vaults; and in that it increases the facilities of member banks for short term credit, secured by bills not actually discounted. Any national banking association

may apply to the Federal Reserve Board for permission "to establish branches in foreign countries or dependencies or insular possessions of the United States for the furtherance of the foreign commerce of the United States and to act if required to do so as fiscal agents of the United States".

Owing to the initial deposit of the reserves of member banks and the transfer allowed by this Act the Federal Banks now hold about a quarter of the country's grand stock of gold.

* * *

Such is in outline the financial and banking system instituted in 1913 and revised in 1916. It is seen to have involved no radical upheaval of the previous organization. It merely added some new wheels which centralized, and in some respects gave a new direction to, the complex and somewhat unequal mechanism constructed since the beginning of the republic. The State Banks, the National Banks, the sub-treasuries, the circulation emanating from banks in direct contact with the people and secured by Federal debt bonds, were not abolished. They subsist. But the concentration of a considerable part of the national gold reserves in a small number of Federal banks, which could issue Federal notes in case of need, makes incontestably a regularizing force in the money market, and will probably ensure the normal course of commercial and banking operations in times of crisis.

This centralizing tendency is equally applied to agriculture by the Act of 17 July 1916 on agricultural credit. Under this Act also the territory is divided into twelve districts, in this case in accordance with the needs of the different districts for agricultural credit. A Federal land bank is instituted in each of these districts and may open branches within their respective limits. The Federal land banks are individually ruled by administrative boards and collectively by a Federal board of agricultural credit. The minimum subscribed capital — \$4,000,000 in the case of Federal Reserve Banks — is \$750,000 in the case of Federal banks of agricultural credit; and as the former receive it from the National Banks so do the latter receive it from national associations of agricultural credit, the government of the United States supplying any deficiency in the case of both. Banks of both categories act as fiscal agents of the government and receive deposits of public funds.

Every Federal Reserve bank can buy and sell land bonds issued in accordance with the agricultural credit Act, exactly as they can undertake analogous operations involving district, county and municipal bonds.

Federal land banks are inspected according to the rules applicable to National and to Federal Reserve Banks.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

CANADA.

THE APPLICATION OF THE AGRICULTURAL ACT IN BRITISH COLUMBIA. — The Hon. Wm. Manson, superintendent of the Agricultural Credit Commission of British Columbia in *The Agricultural Journal*, Victoria (British Columbia), Vol. I. No. 9, November 1916.

The Agricultural Act was placed upon the Statute Book of British Columbia in March 1915. It authorizes the borrowing of \$15,000,000 to be administered by a Commission, the debentures of this Commission being guaranteed by the government of the province.

The money market has been unfavourable to borrowing money for some time before and since the outbreak of the war, but last spring a loan of \$1,000,000 was obtained under the Act to begin the work and give definite aid in developing agriculture. The money cost 5.63 per cent. and is being lent to the farmers at 6 ½ per cent.

Long term loans for twenty, thirty and thirty-six and a half years may be made on the amortization plan, interest and principal being payable half-yearly.

Short term loans for from three to ten years need not be amortizable. The Commission has decided that, while it prefers all such loans to be amortizable, it will yet for the present grant straight loans for three, four or five years, the interest on which will be payable half-yearly; and that loans for from six to ten years must, like the long term loans, be payable on the instalment plan, the interest and principal being payable half-yearly.

Borrowers may from time to time, on any date at which interest is due, pay off \$25 or any multiple of \$25 in addition to the regular half-yearly payments,

The Act requires that money lent for the improvement of agricultural land be advanced only as such improvements are made, and the Commission is arranging accordingly in granting each loan.

A great many applications are being received for money to pay off existing mortgages. In view of the limited amount of money at its dispo-

sal it is the policy of the Commission to give first consideration to applications for money to be used towards the definite increase of agricultural production. The applications for money to be used exclusively to pay off mortgages are therefore being held abeyant for the time being.

As the system is still new in British Columbia statistical information is limited, but the following figures may be of interest.

	Number	Average Amount	Total Amount
Applications received to date . .	104	\$ 1,554	\$ 2,175,443
» appraised » » . .	464	» 2,324	» 1,078,606
Loans granted » » . .	144	» 1,628	» 234,430
Applications withdrawn » » . .	7	» 2,368	» 16,575
» refused » » . .	142	» 2,425	» 344,405
» held over » » . .	—	—	—
(for money to pay off existing mortgages).	121	» 3,078	» 372,450

Loans Granted.

5 of	\$ 250 =	\$ 1,250
2 »	300 =	600
21 »	500 =	10,500
2 »	600 =	1,200
3 »	750 =	2,250
2 »	800 =	1,600
2 »	850 =	1,700
26 »	1,000 =	26,000
4 »	1,200 =	4,800
12 »	1,250 =	15,000
1 »	1,300 =	1,300
16 »	1,500 =	24,000
4 »	1,800 =	7,200
16 »	2,000 =	32,000
1 »	2,280 =	2,280
8 »	2,500 =	20,000
4 »	3,000 =	12,000
2 »	3,500 =	7,000
4 »	4,000 =	16,000
1 »	4,250 =	4,250
6 »	5,000 =	30,000
1 »	5,500 =	5,500
1 »	8,000 =	8,000

144 \$ 234,430

The terms for which loans have been granted are as follows :

3 years, straight loans	3
5 " " "	28
7 " amortizable "	1
8 " " "	3
9 " " "	1
10 " " "	42
20 " " "	32
30 " " "	14
36 1/2 " " "	20
Total	144

Appraisal Fees.

\$ 500 or under	\$ 2.50
Over \$ 500 up to \$ 1,250.	5.00
" \$ 1,250 " " \$ 2,500.	7.50
" \$ 2,500 " " \$ 10,000.	10.00

Legal Fees.

Up to \$ 2,500	\$ 5.00
Over \$ 2,500 up to \$ 3,750.	7.50
" \$ 3,750 " " \$ 5,000.	10.00
" \$ 5,000 " " \$ 7,500.	15.00
" \$ 7,500 " " \$ 10,000.	20.00

Half yearly repayments on loans are as follows, interest and principal being included :

On \$ 1,000 for 3 years	\$ 186.00
" " " 4 "	145.00
" " " 5 "	119.00
" " " 6 "	102.00
" " " 7 "	90.25
" " " 8 "	81.25
" " " 9 "	74.25
" " " 10 "	69.00
" " " 20 "	45.00
" " " 30 "	38.25
" " " 36 1/2 "	36.00

The Commission was employing last November five appraisers in different parts of the province and every effort was being made to complete the work of appraising before the winter weather set in.

Two of the directors of the board have spent a considerable time in the field with the appraisers, in order to obtain first-hand information as to agricultural land and conditions throughout the province and to help them to establish a proper basis of valuation.

The reports of the appraisers are received at the head office weekly, and as they come in the Commission decides on the applications.

EGYPT.

THE OPERATIONS OF THE LAND BANK OF EGYPT IN 1916. — From the reports of the board of directors and of the auditors for 1915-1916. Alexandria, *Société de publications égyptiennes* 1916.

The improvement in financial conditions apparent in Egypt as early as the autumn of 1915 persisted throughout 1915-1916, important supplementary resources, determined by the European conflict, compensating partially for the deficit due to the insufficiency of the cotton harvest.

This general situation influenced the business of the Land Bank of Egypt in the year which closed on 30 September 1916.

Mortgage business, which had been arrested since the beginning of the war, consisted principally in transactions tending to consolidate and regularize certain old loans. However towards the end of the year the bank thought it right to resume on a very modest and prudent scale the examination of certain business which presented particularly advantageous conditions in the matter of security. The total sum of the mortgage loans in being on the date mentioned was 91,643,830 francs (1). Since the Land Bank was founded it has concluded 2,552 amortizable loans and 99 sales of real estate, also amortizable, for the total sum of 195,723,088 francs. Only 26 of these loans were made last year, their total sum being 15,978,528 francs, to which a current mortgage account of 77,770 francs must be added.

Advances for short terms made last year to borrowers on mortgages, who applied for them for the needs of their holdings, such loans being within the limits of the returns from the land cultivated, amounted to 476,332 francs.

Although receipts in coin were far larger than in the preceding year, the restrictions of credit which circumstances imposed on the fellah, and the necessity of meeting none the less, with a defective production, agricultural costs increased by costliness of primary materials, increased arrears which passed from 10,486,893 francs on 30 September 1915 to 11,621,890 francs on 30 September 1916.

(1) 1 franc = 9 $\frac{8}{16}$ d at par.

The liquidation of real estate forming the bank's property was, like annual payments, affected by events. This property comprised when the preceding banking-year ended about 2,842 feddans (1) and 31,980 square pikes (2) of building land (two urban real estate holdings and fifty-three rural holdings), representing altogether a credit of 3,757,116 francs. Last year new expropriations added to this property forty-nine rural and one urban real estate holdings, representing a credit of 3,154,535 francs. When the amount covered by the sales (twenty entire holdings, eleven parts of holdings and one urban holding), 1,527,861 francs, had been deducted there remained on 30 September 1916 two urban and 82 rural holdings having a total area of 3,813 feddans and 132,136 square pikes and representing a credit of 5,383,790 francs. The administration resulted in a total profit of 1,820,768 francs.

The following tables show the nature and the terms of the loans granted :

Classification of Current Loans according to the Nature of the Security
(30 september 1916).

Nature of loan	Number	Capital still due
		Egyptian pounds (1)
Rural loans	1,678	3,393,536
Urban "	47	110,616
Mixed "	4	31,008
Total	1,729	3,535,160

(1) Egyptian pound = £ 1.828.

Thus according to these figures the rural loans represent about 97 per cent. of the total amount of the mortgage loans of the Land Bank.

Classification of Amortizable Loans according to their term.

Term	Number of loans	Capital still due
		Egyptian pounds
Less than 10 years.	92	77,917.797
from 10 to 20 "	983	982,515.012
from 21 to 30 "	608	1,386,640.147
from 31 to 40 "	16	592,130.294
from 41 to 50 "	1	359,244.493
Total	1,700	3,398,447.743

The average term of the loans is twenty-three years and two months.

(1) 1 feddan = 1.79374 acres.

(2) 1 square pike = 1.67153 square yards.

UNITED STATES.

I. DETERMINATION OF FEDERAL LAND BANK DISTRICTS.

On 27 December 1916 the Federal Farm Loan Board, created under the Federal Farm Loan Act, announced its determinations as to the States to be included in each of the twelve Federal Land Bank Districts provided by the Act, and the town chosen as the site of the Land Bank in each district. The following list shows these conclusions.

District No. 1. — Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York and New Jersey. The bank to be at Springfield, Massachusetts.

District No. 2. — Pennsylvania, Delaware, Maryland, Virginia, West Virginia and district of Columbia. The bank to be at Baltimore, Maryland.

District No. 3. — North and South Carolina, Georgia and Florida. The bank to be at Columbia, South Carolina.

District No. 4. — Ohio, Indiana, Kentucky and Tennessee. The bank to be at Louisville, Kentucky.

District No. 5. — Alabama, Mississippi and Louisiana. The bank to be at New Orleans, Louisiana.

District No. 6. — Illinois, Missouri and Arkansas. The bank to be at St. Louis, Missouri.

District No. 7. — Michigan, Wisconsin, Minnesota and North Dakota. The bank to be at St. Paul, Minnesota.

District No. 8. — Iowa, Nebraska, South Dakota and Wyoming. The bank to be at Omaha, Nebraska.

District No. 9. — Oklahoma, Kansas, Colorado and New Mexico. The bank to be at Wichita, Kansas.

District No. 10. — Texas. The bank to be at Houston, Texas.

District No. 11. — California, Nevada, Utah and Arizona. The bank to be at Berkeley, California.

District No. 12. — Washington, Oregon, Montana and Idaho. The bank to be at Spokane, Washington.

To this list the board added the following statement:

"In determining the Federal Land Bank Districts, and in designating the cities within such districts where Federal Land Banks shall be located, the Federal Farm Loan Board has given careful consideration to the farm loan needs of the country. The board held public hearings in nearly every State in the Union, and in this manner collected information of great value in determining its decision.

"Every reasonable opportunity has been afforded applicant cities to furnish evidence to support their claim as locations of Federal Land Banks. More than seventy-five cities applied to be designated as the headquarters of a bank and were heard through representative committees and individuals".

Officials of the Farm Loan Boards announce that before the end of 1916 more than 50,000 farmers had applied for mortgage loans, of which the approximate aggregate amount was \$ 150,000,000 or more than seventeen times the sum which would be immediately available for loans when the twelve farm loan banks were organized.

Most of the applications came from the south and west, 2,000 of them from Iowa alone.

It was expected that almost immediately after their organization the banks would find it necessary to issue bonds virtually for their entire capital stock, in order to meet the demands of borrowers.

* * *

2. THE SUBSCRIPTION OF THE CAPITAL OF THE FEDERAL LAND BANKS. —
The Economic World, New York, 10 March 1917.

In accordance with the terms of the Federal Farm Loan Act subscription books were opened to the public to the capital stock of the Federal Land Banks, which are to represent in the new Federal Farm Loan System that for which the Federal Reserve Banks stand in the Federal Reserve System. The fact that the banks were unlikely to pay any dividends on this stock during the first year and that it will ultimately be retired at par naturally made it unattractive to investors. Subscription in none of the twelve districts nearly reached \$750,000, the minimum issue of capital stock of each bank under the terms of the Act.

The total sum subscribed was only \$120,095, distributed as follows : Springfield, Mass., \$10,275 ; Baltimore, Md., \$9,780 ; Columbia, S. C., \$410 ; Louisville, Ky., \$7,735 ; New Orleans, La., \$4,570 ; St. Louis, Mo., \$7,925 ; St. Paul, Minn., \$5,360 ; Omaha, Neb., \$41,735 ; Wichita, Kan., \$6,335 ; Houston, Tex., \$14,715 ; Berkeley, Cal., \$6,110 ; Spokane, Wash., \$5,145.

The Treasury Department has therefore been obliged to subscribe no less than \$8,879,905 of the capital stock of the twelve Land Banks. It is of course expected that the stock now subscribed for will be gradually retired, through the operation of the provision of the Act which requires the Farm Loan Associations — that is in the last resort the borrowing farmers themselves — to subscribe for stock of the banks to the extent of 5 per cent. of the amount they apply for as loans.

The fact that legislation is now pending which will make farm loan bonds legal investments for trust funds and the funds of savings banks and insurance companies in most States in which they are not such already, should insure for them a ready market at a satisfactory rate of interest.

Part IV: Agricultural Economy in General

GERMANY.

THE SUBDIVISION OF LAND IN OLD BAVARIA.

OFFICIAL SOURCE:

BEITRÄGE ZU STATISTIK DES KÖNIGREICHES BAYERN. Landwirtschaftliche Betriebsstatistik Bd. 51, 64, 81. Güterzertrümmerungen Bd. 59. Anhang 66 (*Contributions to the Statistics of the Kingdom of Bavaria. The Statistics of Farms, The Subdivision of Lands*).

OTHER SOURCES:

RABEL (Dr. B.) Landwirtschaftliche Besitzverteilung und Besitzverschiebung in Altbayern (*The Distribution and Conveyance of Farms in old Bavaria*) Leipzig, 1915.

STECHERLE (Dr. F.): Die Güterzertrümmerung und landwirtschaftliche Zwangsveräußerungen in Bayern (*The Distribution of Lands and Forced Transference of Landed Property in Bavaria*) Annalen des Deutschen Reichs, Nos. 10-12, 1915.

The name "Old Bavaria" is given to the three Bavarian provinces of Oberbayern, Niederbayern and Oberpfalz, of which the area and population are as follows:

	Area in Hectares (1)	Number of Inhabitants
Oberbayern	1,704,653	1,434,792
Niederbayern	1,076,756	702,450
Oberpfalz	966,476	577,912
	3,747,885	2,715,154

Agriculture employs the greater part of the population namely:

in Oberbayern	62.7	per cent.
" Niederbayern	65.6	" "
" Oberpfalz	59.7	" "

(1) 1 hectare = 2.47 acres.

The cultivated area measured in 1910 2,119,677 hectares, when there were 248,054 farms, which is to say that the average area of a farm was 8.5 hectares.

Most farms measure from two to twenty hectares, and farms of this size occupy the largest part of the cultivated area, as follows :

	Percentage of Number of Farms —	Percentage of Cultivated Area —
Oberbayern	62.9	51.6
Niederbayern	62.7	56.2
Oberpfalz	64.8	62

The group occupying the second largest part of the cultivated area is that of the farms of from twenty to a hundred hectares :

	Percentage of Number of Farms —	Percentage of Cultivated Area —
Oberbayern	13.1	45
Niederbayern	10.5	40.7
Oberpfalz	8.9	33.3

Farms of less than two or more than a hundred hectares cover an insignificant area, but the number of those measuring less than two hectares is very large. .

	Percentage of Number of Farms —		Percentage of Cultivated Area —	
	Less than 2 hectares —	More than 200 hectares —	Less than 2 hectares —	More than 200 hectares —
Oberbayern . .	23.7	0.3	1.8	1.6
Niederbayern .	26.6	0.2	2.7	1.3
Oberpfalz . . .	26.1	0.2	2.7	2

From 1882 to 1907 there were very important changes in the various groups as regards the cultivated area, the number of farms and these percentages. The number of the farms and the cultivated area at these two dates were as follows :

	1882 —		1907 —	
	Number of Farms —	Area in Hectares —	Number of Farms —	Area in Hectares —
Oberbayern	98,296	913,116	92,243	904,227
Niederbayern	83,891	687,131	82,520	680,218
Oberpfalz	65,867	519,380	64,071	494,929

As is seen from this table both the number of farms and the cultivated area were diminishing, doubtless as a result of the development of industry.

In the same period the percentage of farms having an area of from two to twenty hectares changed as follows :

	1882 Percentage		1907 Percentage	
	Farms	Area	Farms	Area
Oberbayern	58.2	49.8	62.9	51.6
Niederbayern	57.1	52.1	62.7	56.2
Oberpfalz	59.0	55.8	64.8	62.0

This is to say that the percentage formed both by the number of these farms and by their area had increased, while these percentages concerned with farms of less than two and of more than twenty acres had decreased, as is seen from the following table :

	1882 Percentage		1907 Percentage	
	Number of Farms	Area	Number of Farms	Area
Farms of more than 20 hectares				
Oberbayern	13.2	48.1	13.4	46.6
Niederbayern	11.2	44.8	10.7	41.1
Oberpfalz	10.1	40.8	9.1	35.3
Farms of less than 2 hectares				
Oberbayern	28.6	2.1	23.7	1.8
Niederbayern	31.7	3.1	26.6	2.7
Oberpfalz	30.9	3.4	26.1	2.7

The average extent has remained almost unchanged, as follows :

	1882 Percentage	1907 Percentage
Oberbayern	9.3	9.8
Niederbayern	8.2	8.2
Oberpfalz	7.9	7.7

The official statistics give us no data as to landed property. With respect to it particular statistics, concerned only with isolated districts, must be consulted. From these we can deduce :

1) That the farms having an area of from two to a hundred hectares are cultivated by their owners, those held and cultivated by lessees representing only from 1.7 to 3 per cent. of the cultivated area.

2) That this percentage is slightly higher in the cases of farms of less than two and more than a hundred hectares. From about 15 to 20 per cent. of the total area of these groups is cultivated by lessees.

The extent of the farms has been influenced by :

- 1) the system of hereditary succession ;

2) the sale of property in parcels which produces excessive subdivision (*Güterzertrümmerung*).

In all old Bavaria the system of single succession is in force. Landed property is inherited by a single heir, the other heirs being paid the price of their shares. This system has a feudal origin and has been preserved by the conservative spirit of the agriculturists who have remained faithful to ancient customs.

Landed property is generally, or at least oftenest, inherited by the youngest heir, for reasons both economic and social. It is the custom for children when they marry to leave the paternal home in order to settle on their own farms. A farmer generally marries when he is between twenty and twenty-five years old; and when his children marry in their turn he is still able to cultivate his farm without them.

The price which the heirs receive as their share is always a little less than it would be if the land were sold freely. The price of buying back the shares is none the less very high, so that the net profit yielded by the farm is brought only with difficulty up to 2 or 3 per cent.

Besides paying the shares of his brothers and sisters the heir of the land has to maintain his parents. The conditions of this maintenance are fixed by a contract in which the quantity and quality of the objects agreed upon are minutely specified. The stipulation that the value of the maintenance be paid in cash is very rare.

This system of succession prevents the formation of too minute holdings, but it leaves the holdings burdened with debts; and the eventual result of this is that there is after all subdivision. In other words holdings are sold in parcels.

These sales are made:

a) By the owner who retains his dwelling-house and the appurtenant lands and divides his remaining land into parcels which he sells separately.

b) By the medium of a speculator in land who buys the whole holding and divides it into lots which he sells on his own account.

Such division has attained to enormous proportions of recent years, as is seen from the following table:

Properties sold in lots			
	Number	Area	
1901-1902	425	8,411.77	hectares
1902-1903	425	8,824.85	"
1903-1904	519	11,049.23	"
1904-1905	589	11,500.44	"
1905-1906	709	14,019.19	"
1906-1907	759	14,911.55	"
1907-1908	802	16,035.42	"
1908-1909	802	14,461.64	"
1909-1910	810	12,914.68	"

In 1903 a commission was nominated to investigate the causes of this phenomenon and its consequences. The commission's report states that :

I: The following are the causes of the excessive subdivision :

1. The debt burdening landed property, owing to the system of succession and that of subdividing the lands, that is to say to the high price which the farmer pays for the parcels he buys.

2. The insufficiency of labour which makes the costs of agriculture heavy, especially in the case of the larger farms having an area of more than twenty hectares.

3. The speculation of those who increase their profits by subdividing the lands.

II. The following are the consequences of the excessive subdivision :

1. The wasting of woods, for speculators in land cut down the woods on a holding before they sell it in parcels.

2. The withdrawal from agriculture of the circulating capital represented by the profits of speculators which attained to nearly four and a half million pounds in the period between 1892 and 1904.

These consequences of subdivision, so detrimental to agriculture, induced the Bavarian government to take measures to prevent or at least to impede its progress. The first of these measures dates from about 1850 when a law forbidding subdivision by speculators was promulgated. It was however only in force for some years, being repealed about 1860, between which date and 1894 subdivision was again unhampered.

The measures taken by the government in 1894 and 1899 allow subdivision but regulate it. Special laws forbid the sale of immature woods and make the speculator liable for arrears of taxes with which the subdivided lands may be burdened.

The commission in 1903 was instructed not only to examine the causes and consequences of subdivision but also to answer the two following questions :

1. Would it be opportune to forbid subdivision by decree, as was done in Wurtemberg ?

2. Would it be opportune to offer special privileges to rural banks as inducements to them to substitute themselves for speculators in land ?

The commission in its report answered the first question in the negative, the second in the affirmative.

On the basis of this report the law on the subdivision of lands was promulgated on 13 August 1910. Its most important provisions are contained in its first and second articles.

The first article establishes a right of pre-emption in favour of :

a) Rural banks of the district.

b) Credit institutions authorized to such end by the Minister of Agriculture (the co-operative agricultural unions having their headquarters at Munich and Regensburg have also been thus authorized).

c) The respective communes.

In order that this right of pre-emption may be valid it must be declared within twenty-one days.

The second article gives a right to withdraw :

- a) to the farmer who sells his land to a speculator, within seven days ;
- b) to farmers buying parcels of land from speculators, within five days.

The official statistics give us the following data as to the subdivision of land from 1 March 1911 to the end of 1912 :

	Number	Area	
	of subdivided properties		
1911	295	4,861.36	hectares
1912	453	5,184.97	"

If these data be compared with those for preceding years the law will be seen to have lessened subdivision.

The following figures show the participation of rural banks in these transactions from 1905 to 1912 :

	Number	Area	
	of subdivided properties		
1905-1906	25	361.70	hectares
1906-1907	25	417.47	"
1907-1908	27	312.92	"
1908-1909	26	344.22	"
1909-1910	33	430.99	"
1910-1911 (1)	51	953.58	"
1911 (2)	74	1,652.96	"
1912	106	1,577.87	"

As is seen from this table the participation of rural banks has noticeably increased since the law of 13 August 1910 has been enforced, while that of speculators has diminished. The following figures show the part played by speculators in the aggregate subdivision accomplished in 1912.

Oberbayern	24.2	per cent.
Niederbayern	46.2	" "
Oberpfalz	49.1	" "

(1) Up to 1 March.

(2) From 1 March.

In spite of the favourable results obtained in 1911 and 1912 those who understand the question do not anticipate that the rural banks will completely supersede the speculators. Subdivision does not entirely square with the business of rural banks. It is a transaction which needs large capital and time for its conclusion ; and it is moreover an entirely commercial transaction which cannot be free from a speculative element. Therefore it is somewhat outside the scope of the rural banks ; and the foundation of special institutions which will undertake it has been proposed.

AUSTRIA.

SOME AGRICULTURAL PROBLEMS IN DALMATIA.

OFFICIAL SOURCE.

OESTERREICHISCHES JAHRBUCH FÜR 1912 (*Austrian Yearbook for 1912*), Vienna 1912.

OTHER SOURCES :

GRUBISIČ (A.) : Agrarne operazije kao sredstvo za podigunce ekonomičnik okolnosti Dalmacije (*Agricultural Operations as a means of promoting Economic Progress in Dalmatia*), Pola, 1911.

VINSKA KRIZA. IZVEŠĆE O ANKELI (*The Crisis in Wine Production. Reports of the Enquiry*) Spalato, 1909.

LEITHE (DR. H.) : Dalmatinische Agrarprobleme (*Dalmatian Agrarian Problems*), Wreña, 1912.

§ I. AGRICULTURAL AREA AND IMPROVEMENTS.

Dalmatia is pre-eminently an agricultural country. According to the available statistics it had, in 1911, 642,810 inhabitants of whom 518,790 or 86 per cent. belonged to the agricultural class. Nevertheless Dalmatia exports no agricultural products, but in fact imports a large quantity of them. In 1912 it imported :

240,500 crowns' (1)	worth	of	cereals
797,300	"	"	fruit and vegetables
293,200	"	"	animal products.

The values of the merchandise of these respective categories exported were 69,400, 133,100 and 81,900 crowns. Only with respect to live stock did the value of exports — 674,000 crowns — exceed that of imports — 26,800 crowns. Thus the case of Dalmatia is the singular one of an agricultural country which has an agricultural production inadequate to its own needs. It is worth while to seek the causes of this phenomenon.

(1) 1 crown of gold = 10 $\frac{1}{12}$ d. at par.

Dalmatia has an area of 1,283,000 hectares (2) distributed as follows :

Arable land	137,238	hectares
Vineyards	81,853	"
Olive plantations	31,992	"
Gardens	37,024	"
Prairie-land	10,492	"
Pasturage	562,900	"
Woods	329,627	"
Marshy lands	63,383	"
Roads, water-courses, buildings, etc.	29,000	"

The terms pasturage and woods need explanation. The official statistics include as woods all lands once wooded, even in a somewhat remote past and even if to-day they are bare save for occasional shrubs and bushes. The name pasturage is applied even to lands on which grass grows sparsely for three or four months of the year while for eight or nine months they are completely bare.

The table we have given shows that 22 per cent. of the whole area is cultivated while 78 per cent. is formed of uncultivated land.

With respect to the soil's natural fertility the total area of Dalmatia can be divided into land of three categories :

1. The land of the first category has an area of from 180,000 to 200,000 hectares. It comprises the so-called " polja " strips of land lying along the shores and the banks of the water-courses. This land is exceptionally fertile.

2. The second category includes all the woodland and most of the pastureland and may be considered to have a minimum fertility.

3. Between these two extremes is a third category, that of the marshy lands and the mountain slopes. In point of natural fertility these lands approximate to those of the first category. But before they can be brought under cultivation preliminary measures are necessary — the draining of the marshy lands and the reforestation of the mountain lands. Without these improvements these lands approximate rather to those of the second category, remaining lands of minimum fertility.

The facts stated point to the first agricultural problem which has to be solved in Dalmatia, that namely of extending the cultivated area. For this improvements of two kinds are needed — works of drainage and of reforestation.

§ 2. THE DISTRIBUTION OF LANDED PROPERTY.

With respect to the distribution of landed property Dalmatia presents two extremes : properties are very large or very small. This is due to spe-

(2) 1 hectare = 2.47 acres.

cial conditions in the country. The feudal regime established under the influence of Venetian dominion, Turkish dominion and Slav customs has been preserved until to-day.

The large properties belong to individuals or to the communes, the latter owning altogether 656,000 hectares or 50 per cent. of the country's whole area.

Side by side with the large properties, which are an outcome of the feudal system, properties of very small extent have gradually been formed as follows :

a) By means of contracts of sale and purchase. The large landowners are not averse from selling their property, for in Dalmatia there is almost always a lack of labour and very extensive areas are therefore left uncultivated.

b) By means of a distribution among members of a commune of the communal landed property. Hitherto about 12,000 hectares have thus been distributed.

c) By means of encroachments on the communal property.

Large and small properties are alike often scattered. Small proprietors generally own from three to four quarter or half-hectare plots. Large proprietors often possess fifty scattered parcels of land, sometimes even more. Among the reasons for this state of affairs are the unequal fertility of the lands, the distribution caused by inheritance and the encroachments.

A small proprietor himself cultivates and realizes the value of his land ; whereas a large proprietor nearly always lets it. The latter himself cultivates it and realizes its value only exceptionally, most frequently in the south of Dalmatia, in the province of Kanali where there is an abundant supply of Montenegrin labour.

Large properties are always let in parcels. There are two forms of leases ; a) the ordinary lease which is very rare ; and b) the contract of cultivation, a type to which from 85 to 90 per cent. of the contracts conform. Parcels let by these contracts have an area of from one to three hectares.

The communes, especially those in the northern islands, also let the arable lands which form part of their landed property. Their woods and pasturelands are used by all their members.

Owing to the lack of labour consequent on the emigrations of recent years an important amount of land admitting of cultivation is lying fallow.

The distribution of landed property, as this has been explained, and the method by which it is cultivated, bring us to three further agrarian problems : those namely, of 1) the farming contract, 2) the distribution of communal landed property, and 3) the redivision of lands.

§ 3. THE FARMING CONTRACT.

This contract is from a legal point of view a lease *sui generis*, whereas from an economic point of view it may be regarded as imposing a slightly modified feudal tenure.

Its content is as follows :

1. The proprietor lets to the cultivator the land when it is still lying waste. The cultivator must therefore bring it under cultivation before he can farm it.

2. The duration of the contract depends on the duration of crops. Where grain is grown it is from one to two years, in the case of vineyards from twenty-five to fifty years.

3. The contract obliges the lessee to give a part of the gross products, generally a quarter, to the proprietor.

Such is the content of the normal and most usual type of contract. Exceptionally there are deviations from it as regards the duration of the lease and its terms.

The most important results of such contracts are :

- a) Extensive agriculture.

- b) Difficulties, unfortunately too frequent, arising between the proprietor and the lessee.

Since the lessee is obliged to render a share of the gross products to the proprietor, he does no more than cultivate the land on the extensive system, for otherwise he would have to give the proprietor all or almost all its net yield owing to the law as to a rental which is less than proportionate. Extensive agriculture is facilitated by the fact that the lessee is as a rule himself a small proprietor. It is therefore entirely to his interest to cultivate his own property first, and the land he rents is in consequence often not cultivated in time.

The lessee looks upon the proprietor as a parasite who steals from him a part of his products. He therefore seeks by every means in his power to take back what he considers to have been robbed from him.

About 1894 an event occurred which resulted in the supersession of a fair number of farming contracts by ordinary leases.

Towards 1890 the phylloxera appeared in the country. Gradually the vineyards of Dalmatia were devastated. This fact in itself annulled the contracts relevant to them. Everywhere people began to replace the indigenous vine with the American variety. Plantation however necessitated larger expenditure. Contracts of lease are more easily adapted than farming contracts to plantations of this kind ; and so it came about that a misfortune produced good results. The farming contracts were reduced by 20 per cent.

§ 4. DISTRIBUTION OF COMMUNAL LANDED PROPERTY.

The communal property has an area of 656,000 hectares. Its greater part, that is about 55 per cent., is pastureland. Woodland constitutes 30 per cent. and the rest is arable land. The words woodland and pastureland must be given the denotation we have already explained.

On the pastureland the animals of all the members of a commune are pastured. In the woods animals are pastured and wood is cut. In this connection woodcutting properly so-called must be distinguished from the gathering of leaves for forage. Woodcutting is undertaken without any method and the result is real devastation.

Arable land is let by farming contracts. This generally takes place in the islands of the north. Cultivators settled on land belonging to the communes enjoy slightly better conditions than those on private land. In its capacity as proprietor the commune is satisfied with little, as a rule one seventh of the yield converted into cash.

Communal property constitutes an inexhaustible source of controversy among the members of one commune and among adjacent communes. In a government report of 1870 it was said to produce a little grass and many lawsuits. The shepherds are well armed while they pasture their flocks and are almost always at war with members of their commune or with the shepherds of adjacent communes.

Communal property is being more and more reduced in extent by encroachments on the part of those members of communes who are protected by the communal council. These are declared to be proprietors after they have been occupiers for a certain number of years. But it is not rare for a second encroachment to supersede the first on the occasion of a change in the communal council.

Until 1850 the communes paid no taxes on their property because their members paid a tax as usufructories. From 1850 the State placed a land tax on the communal property and the contribution of the usufructories was thereafter paid to the communes.

Until 1850 no change was introduced into communal property. In that year, after the cadaster had been established, it became liable, as has been said, to the land tax. In the same year occurred the first scheme for the distribution of communal property to the members of communes. There have been many subsequent and similar schemes.

For twenty-six years none of them produced any effect; but on 27 March 1876 they had an important result, namely the promulgation of the law on the distribution of communal property.

The terms of this law are as follows:

1. The distribution of communal property is optional. Every commune may either distribute it or retain it as communal.

2. Distribution is made on the following conditions:

- a) A majority of the communal council must have voted in favour of a proposed distribution.

b) It must be accepted by an absolute majority of all the inhabitants registered by the census of the commune.

3. The distribution among the members of the commune will be made by the communal authorities, assisted by a surveyor.

4. Before a distribution is made the land which it should not affect, that is the land which will remain the commune's property, will be surrounded by a hedge.

Hitherto 12,000 hectares have been distributed in fourteen communes, in accordance with this law.

§ 5. REDIVISION.

We will devote a few words to the problem of redivision.

It has already been said that landed property in Dalmatia is too much scattered, many proprietors owning from fifty to eighty parcels of land.

In view of this state of affairs redivision would be very useful. It is however very rarely proposed and the law on subdivision promulgated in 1883 has never been applied. The reason for these circumstances is not hard to seek.

The problems of the farming contracts and of the distribution of landed property are distinct. That of division cannot however be solved finally, in view of existing agrarian relations, until after the two former. If a redivision were to be undertaken today it could be only provisional and would have to be renewed after the other two problems had been solved.

Owing to such dependence on other questions redivision cannot be considered in isolation. Redivision was last proposed in 1910 by Deputy Sununcitch, who suggested that it should be undertaken simultaneously with the solution of the problems of the farming contracts and of the distribution of communal property,

UNITED STATES.

FARM TENANCY IN THE UNITED STATES

by Prof. BENJAMIN H. HIBBARD,

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INTRODUCTION.

So far as the authentic history of tenancy in the United States is concerned it may be said to begin with the year 1880 since at that time the first tenancy census was taken. The percentage of farms operated by tenants for the four census years, by divisions, were as follows :

	<u>1870</u>	<u>1900</u>	<u>1890</u>	<u>1880</u>
United States	37.0	35.3	28.4	25.5
North Atlantic division .	18.2	20.8	18.4	16.0
South Atlantic division .	45.9	44.2	38.5	36.1
North Central division . .	28.9	27.9	33.4	20.5
South Central division . .	51.7	48.6	38.5	36.2
Western division	14.1	16.6	12.1	14.0

It will be seen that in 1880, about one in four farms was operated by a tenant; in 1910 almost two out of five were in the tenant group. Unquestionably the proportion is somewhat higher by this time than it was six years ago. The number of tenant farms increased 130 per cent. during the thirty year period covered by the statistics, while during the same time there was an increase of but 34 per cent. in the number of farms worked by owners. At these disproportionate rates of increase it will take but another three decades to result in a larger number of tenants than landowning farmers, thus making us unmistakably a nation of tenants and landlords. It is, however, by no means certain that the proportion of tenants will continue to show an uninterrupted increase. In fact the increase has already ceased, and a turn in the other direction been made, according to the last census, in twelve

of the older States. There was also a decrease in tenancy percentages in several of the newer States but the significance of the change in these States is different from that in the older settled part of the country.

Tenancy reaches its highest point in the cotton belt. For instance in Georgia two thirds of all farms are rented. The percentage is also high in the corn belt; in Illinois over two fifths of the farms are rented, and largely in the best part of the State.

It is, then, plain that the growth of tenancy in the United States has for at least three decades been rapid. Before the year 1880, there had undoubtedly been a much less rapid growth, yet it had reached important proportions nevertheless. The question may very properly be asked why so many farms should be farmed by others than their owners. Especially is this a pertinent question in view of the fact that within a half century the federal government has disposed of immense tracts of public domain on terms so favourable as to make ownership easy and the necessity of renting land of a landlord remote. Several hundred million acres of land have within a half century either been granted free of charge to the settler, or sold at such low prices as to suggest a gift. And this plan of disposing of the land was with the conscious idea of putting land into the hands of the men who should acquire it for their own use. And yet upon much of the land given away, or sold for \$ 1.25 per acre during the seventies or the eighties, are now to be found tenants, in many instances as many tenants as owners.

The causes of this remarkable development of a tenant class, if class it may be called, are complex. In the first place it may be remarked that very few American farmers prefer to be tenants rather than owners. So far as the man on the farm is concerned he is either the owner or a prospective owner. The young man expects to rent land, but always with the hope and the expectation that the tenancy will lead to ownership. Farmers remain tenants because they find the price of land high, or sometimes it may mean that the price of the farm is high not so much because of high price per acre as because it requires many acres to make an efficient unit. High price per acre would rule in the case of truck farming land, in fruit land, irrigated districts, or in general farm land near a great city. High cost of the farm as a whole, due primarily to great size, would obtain in the wheat belt and still more in the grazing belt. But whichever the cause, the fact remains that it is no easy matter for a young man to gain possession of a farm worth \$10,000 to \$20,000. Somebody must make a considerable payment on a farm of this kind before the owner is willing to take a mortgage for the balance, or a bank is willing to advance the funds.

Nearly two thirds of the farms rented are rented for a share of the product. Out of each hundred farms, twenty-four are rented in whole or in part on shares, and thirteen are rented for cash. The cash rent as used in the census figures does not always mean actual money, but instead signifies some other form of fixed payment, such as a specified quantity of cotton. It cannot be said that one form of rent payment is good and the other bad,

or that one is even better than the other. There are, however, advantages of each from the standpoint of both landlord and tenant. For instance cash rent is simpler ; there is no room for disagreement as to amount, or as to time of payment. It is supposed that cash payment of rent signifies a more independent position of the tenant. He is free to do as he pleases in many particulars. Under the condition of cash rent the landlord as a rule exercises relatively little control over the management of the farm. In fact inability or unwillingness to do so is a prime reason on his part for preferring cash, even though somewhat less in amount than share rent. The problem to the landlord of sales of produce is eliminated in the case of cash payment, and all fear of an unfair division eliminated.

On the contrary there are many advantages to both parties in the sharing of the income. The tenant runs less risk, since in case of a failure or partial failure of crops, he is permitted to pay a rental proportionate to the income instead of a cash charge much beyond it. Moreover, it requires less capital on the tenant's part to start farming on shares since under these circumstances he furnishes but half, or possibly some other fraction, of the live stock, feed, and seed needed. As an offset to these advantages the tenant has less freedom of choice in running the farm, though he has the advantage of the landlord's more mature judgement. Control over the farm and its management is one of the foremost reasons for preferring to let land out on shares instead of for cash. It is the general belief on the part of landlords that on an average the returns are greater in the case of share than of cash rent. This is unquestionably true when prices of produce are above normal, or during a period of rising prices such as has obtained during the past fifteen or twenty years. For twenty years after the first tenancy census was taken cash rent gained much more rapidly than share rent and it looked as though it was to become the prevailing system. Then came the census of 1910, with the information that cash rented farms had increased in number but half as rapidly as those rented for a share. This was so pronounced a change as to call for an explanation. While other factors may have entered, the outstanding one seems to be that with the rise in prices of farm produce the share going to the landlord increased rapidly, so rapidly in fact that it was hard to pull cash rent up to the same level. As a consequence landlords were anxious to change from the cash to the share system. Tenants, although not usually so anxious for the change, would acquiesce rather than run the risk on a much increased cash basis. Even the weather may have played a part, since a prolonged series of wet years made crops uncertain in many districts and caused a change in the minds of tenants in favour of share payment. The most encouraging form of tenancy is where landlord and tenant share in both management and income, becoming as it were partners.

§ 1. LENGTH OF TENANCIES.

According to the best information available a tenant stays on a given farm hardly three years. The share tenants move a little oftener than do those paying cash. In contrast to the short period of occupancy by tenants the farms operated by owners are held by a given owner probably about sixteen years. Thus even the owners are not in the habit of staying on the same farm permanently. It must be remembered that America is a new country, and that there is still a strong tendency among farmers to move west and take advantage of the cheaper price of land. Likewise there are many small farms sold in order to purchase larger ones. As a result the farm population at best is not extremely stable.

Tenants are continually on the move because of a variety of circumstances. Many times it has been said that the short lease is the curse of American tenant farming. But the short lease is the result rather than the cause of evils. American farm land has been rising rapidly in value. It has been, in consequence, for sale. As a result of these facts many a farm changes occupants because of a change in ownership, and the owner, so long as he holds the farm for sale, is bound to lease it for short periods of time.

Another important cause of short tenures is the fact that the tenants are themselves developing into farm owners. In the normal course of events a young man starts farming on a small scale, and therefore wants a small farm. A few years later he is better satisfied with a somewhat larger farm, and hence moves if he finds an opportunity, as he usually does. But fully as important as the desire to rent a bigger farm is the prospect of owning a farm for himself. The rate at which tenants become owners is growing somewhat slower. Nevertheless the great majority of those who stay in the farming business a lifetime manage by some means to become landowners. Of all farmers below the age of twenty-five, over three fourths are tenants, whereas of those over sixty-five years of age about six sevenths are owners. It is thus plain that the short periods of occupancy of farms by tenants is in no small measure due to the constant rise of tenants to ownership on their own account.

§ 2. SPECULATION AND TENANCY.

Very closely related to length of tenure and to the amount of tenancy is speculation in land. From the very beginning of the public land policies of the country speculation on the part of individuals has played a major role. The cheap government price has always been tempting to investors, and rare indeed is the case of land which has not been held many years primarily for the rise in value. This speculative period has lasted well beyond the early years when land was cheap, and mainly unused. It pre-

vails to a great extent throughout the country today. The speculator wants to get what he can out of the land while he holds it and thus puts it on the market for rent. He is even willing to take a very moderate rental rather than not let it at all, and above all he will not tie his own hands with a long lease. In parts of the grain belt where speculation has reached its greatest development half of the farms are rented. The landlords when asked whether or not the investment is a paying one are likely to reply that the rise in land values makes it pay, though rent alone would not. So long as land continues to rise in value, so long will it be the object of speculation, and so long as non-farmers are tempted to buy it for speculation, so long again will it be offered for rent. The relationship between speculation and rent is a close one. Lest the reasoning concerning this point seem to be unduly deductive it may be said that in the older parts of the United States, where the rise in values has become much less rapid than formerly, and especially much less rapid than in the Middle West, the percentage of tenancy is in the first place lower than a few years ago, and in the second place decidedly lower than in the latter section. Moreover, in Europe where farm land is much more stable in value than in America, tenures are likewise more stable. So long as there are such splendid opportunities for profitable investments to be made in American farm lands, there is sure to be a continuation or even an increase in the proportion of farms owned by one class and operated by another.

§ 3. TENANCY AND TYPES OF AGRICULTURE.

The evidence is abundant to show that tenancy follows as the natural outcome of conditions, and one of the most important of the conditions is the character of the agriculture in practice. The tenant is transient. Consequently he is bound to adapt himself to an environment which admits of relatively easy shifts. He must get into the routine quickly on arrival at his new home, and must be able to take his possessions along with him from the farm he is leaving. This means that he owns relatively little live stock, that he plants few perennials or biennials, that he invests little money in fertilizers or sub-soil ploughs. The tenants deal with animals and crops that can be made to yield their increase within twelve months. In the truck districts they grow tomatoes, but not asparagus; potatoes, but not rhubarb. What the tenant wants is a chance to sow, harvest and sell, all within a year. It is therefore not surprising that tenancy is most prevalent in the greatest cotton, corn, and wheat districts. In the cotton belt all things seem to conspire to divorce the ownership from the tillage of the soil. The crop is given within the year; it requires but little capital on the part of the tenant, and but little improvement in the way of buildings and fences on the part of the land level. In the corn belt the broad acres capable of cultivation on a wholesale plan, with the prospect of much pro-

duce for the market within a few months, appeal strongly to the man who can command relatively more labour than capital.

The northern tenant is a grain producer and grain seller. He produces more grain of every kind than is produced by the landowning farmer. This means that the tenant raises less of the crops used for feeding young stock, such as hay and pasture crops. The grain which he raises has two main markets. One market is the city; the other is the neighbouring farmer who feeds stock, feeds more grain than he can raise.

The tenant does not go extensively into such business as dairying and for very obvious and important reasons. He must have, in order to do dairying successfully, well equipped barns, milk house, fences and the like. The landlord does not care to furnish facilities of this kind, especially the landlord who holds the farm mainly for speculation. Or again the landlord who lives at a distance from the farm hesitates to put up many improvements of this kind because of the rapid deterioration in careless hands, and many tenants are careless with property which is not their own. Another reason why tenants do not care especially to go into a business like dairying is because it makes it much harder to move and adjust themselves to farms, barns, and surroundings, such as they are likely to find in another neighbourhood. By moving they may not only be obliged to put up with equipment less adequate, but they may, by going ten miles, get away from marketing opportunities, such as milk routes, creameries, or cheese factories. The tenant is not a cattle feeder because of lack of capital required in handling the business, and lack of equipment for handling the cattle and the feed.

The tenant seldom goes into specialized farming such as fruit growing. Fruit growing is a continuous process extending over some years. The tenant has no security of tenure such as to warrant investment in trees, shrubs and labour such as fruit growing requires. Neither does he have character, habits and skill so developed as to make it desirable to lease him a fruit farm which has already been put into shape. The chances are that he will be much more interested in the crop in sight than in subsequent harvests. Only two to four per cent. of the citrus fruits are grown by tenants and an unimportant part of the commercially grown apples are so produced. Specialized farming, such as tobacco or vegetable growing, lends itself very well to tenant conditions, since these crops require little equipment, and but few months.

Summing up the question of the relation of type of agriculture to tenancy, it appears that the tenant is an exploiter of the soil. He does a hand-to-mouth business, and not much may be expected of the farmer whose interests in the farm begin and end within a space of two or three years.

Relative Profits Made by Tenants and Landowning Farmers.]

It is usually taken for granted that tenants are poor. As shown above they have not accumulated a great deal of property from their own operations. Not a great many young farmers inherit a fortune, and even should

they inherit a considerable amount of property it is likely to fall into their hands in middle-life, not when they are making a beginning as farmers. The tenant is, without doubt, in most cases a poor man. However, he is not doomed to remain a poor man always. Somewhat surprising was the result of a government survey made a few years ago into the condition of over seven hundred representative farmers in several northern States. It appears from this survey that tenants make a larger labour income than do landowning farmers. This is another way of saying that under present conditions and circumstances farming as a business does not return a large percentage on the investment. In other words, land rentals have been capitalized at a low rate of interest and in consequence land values are high. Rentals do not rise as readily as the selling value of land and, therefore, other things being equal, it is cheaper to rent land than to buy it. Of course, other things are by no means equal, and it would be hazardous to say that it is better to rent than to buy, but it is safe to say that one must pay for the advantages of owning land. The tenants have more to show for a year's work, so far as immediate income is concerned, than have farmers who own the land they work. This is true if five per cent. interest be charged on the investment in land. Turning the problem around, it may be shown that, since the landowner earns fully as much as a labourer as does the tenant, he has but three to three and a half per cent. interest on his investment. This suggests strongly that the prices of land are too high, and that a farmer will do better to rent than to buy. However, land is still rising in value, especially in the parts of the country where tenancy is prevalent, and the owner has the advantage of the increase in value while the tenant does not. Add to this the great advantage in having control over the operations of a farm for a considerable period of years, the satisfaction of staying in one place and building up a business, and, all told, it suggests caution in advising a man who is able to buy to refrain from doing so. The labour income of the tenant is indeed larger than that of the landowning farmer, but the accumulated wealth at the end of a few years is larger in the case of the landowner.

§ 4. RELATION OF TENANCY TO PERMANENT AGRICULTURE.

The question may well be asked whether tenancy is or is not compatible with the maintenance of soil fertility. In England it has been found possible to keep the soil up to its best over several generations of a landlord-tenant system. But in England the landlords are neither retired farmers, hoping to leave as large an estate in immediate value as possible, nor yet are they speculators who hope to make a sale at an advanced price. The interest of the landlord in the land is a permanent one, and as a corollary to this the interest of the tenant in the land is hardly less permanent. The tenant moves very infrequently and has no hope, usually no desire, to buy land. As the tenant does desire to have the land continue to yield well,

he is willing to make investments to that end, but he does not want to lose the investment in the event of leaving the farm. In America we have hardly reached the point of taking such matters into consideration. First, the landlord usually owns the farm but a decade or two, and the soil will not be greatly depleted in so short a time. Secondly, the tenant who is to stay but a quarter of a decade can hardly take any profound interest in building up the soil. Thus the arrangement which most often obtains impels neither landlord nor tenant to take a great deal of interest in permanent agriculture. The landlord expects to sell the land; the tenant expects to leave it. Very little is invested in fertilizers throughout the grain belt; the tenant very rarely puts any sort of improvement upon the land. Hence, there is but little over which to debate concerning rights when the farm changes hands.

It cannot be held that the fertility is being maintained on the great majority of rented farms. In the very best parts of the country the contrary is the case. True, the census reports show that tenants raise about as much grain per acre as is raised by the owners. This is accounted for in part by the fact that the tenant farms are not a separate group always rented, as distinguished from another group always operated by owners. There is a good deal of interchange. But after all, the fact that the tenants raise about as much produce per acre as the owners proves too much. The tenant sells a large part of his produce in the bulky form of field crops, and this in itself must eventually result in soil depletion. The tenant has decidedly less interest in soil maintenance than has the landlord, and the landlord's interest under present conditions is little enough. When stable values eliminate the speculator, and when few farmers can retire on the strength of unearned increment gains, then we shall have a class of landlords who take a more fundamental interest in the soil and likewise a class of tenants who can afford to co-operate in the up-building of better farming.

The laws at present do not protect the tenant in his right to improvements. On the other hand it is a rare thing for the tenant to wish to make improvements. He may complain because improvements are inadequate, he may urge the landlord to improve; more likely he will move to another farm if conditions are found to be too bad. But that he should put improvements of any sort on the farm will seldom occur to an American tenant. Should laws be made protecting the tenant in this right, it is more than likely that gradually tenants would begin a new regime of land improvement, but it would never progress far while the tenure is, on an average, so short.

§ 5. TENANCY AND MARKETING PROBLEMS.

One of the worst of the tenant evils is the helpless condition in which the tenant is placed with respect to marketing. It is folly to proceed with processes leading always to greater production without taking the marketing possibilities into account. The tenant is a poor bargainer in the market be-

cause so often he is forced to sell almost immediately. In the South the cotton tenant is nearly always in debt for the supplies of the year, and his obligations are due 1 October, or 1 November. This means that he must sell his cotton almost at the earliest possible moment after it is harvested. In farmers' organizations the tenants are very poorly represented. An investigation made a year ago showed that in sections of the grain belt, where tenants are almost as numerous as owners and substantially always grain sellers, the membership in co-operative companies was but one fourth tenants. This means that only half as high a proportion of tenants as owners belonged to the marketing organizations. In other words while tenants sell more grain than owners, there are three owners to one tenant in the selling company.

Tenants as a class are seldom found in organizations. They do not join since they are so likely to move, or on account of lack of money, or again on account of indifference.

Tenants are poor community members. It is not their fault altogether but rather the fault of the system. They cannot be good community members in very solid ways since that implies investment, and for a tenant to invest in schools, roads or churches means an investment for which he gets no title. When a farm owner sells out, he sells his right to community investments along with the farm. When a tenant moves he takes his personal property along with him, and if he has any interest in community property he leaves it behind. As a result he is usually careful that little is created to be so left.

§ 6. THE OUTLOOK.

What then is the outlook? Is America doomed to become a nation of landlords and tenants? True, the proportion of tenants is on the increase, but not in quite all sections. Neither is there an increase in tenancy in all kinds of farming. Another fact that is fairly encouraging is that along with the increase in tenancy there is little tendency toward centralization in land ownership. In about 60 per cent. of the instances of tenancy the owner of the farm owns but the one. And moreover the tenant farms differ little in size from owned farms. Thus landlords own but little more land than is owned by an equal number of landowning farmers. Of course there are many important and unfortunate exceptions to this. Such exceptions are found oftener than anywhere else in the cotton belt, where the ownership of several farms by one man is not uncommon.

Tenancy has often been called a step in the agricultural ladder. The figure of speech is a very good one, since the majority of tenants rise to ownership. However the step is a more difficult one to take now than it was a decade or a quarter century ago. Should it continue to become more difficult for another generation, we must eventually face the fact of a tenant

class, a class which can hardly be said to exist outside of the coloured population of the South.

The tide will turn in favour of ownership if ever we reach the stage where the speculative value of land disappears ; where few farmers are able to retire on the basis of wealth accruing through unearned increment ; and where, therefore, land is worth a sum based on its productivity.

This is on the assumption that a system of agricultural credit favourable to the farmers will in the meantime be worked out. One of the main reasons why it seems safe to suggest that these conditions will result in ownership rather than tenancy is because it is not likely that any system will soon be devised whereby the fertility of the soil will be as well conserved under a tenant system as under a system of ownership.

MISCELLANEOUS INFORMATION
RELATING TO AGRICULTURAL ECONOMY IN GENERAL.

AUSTRALIA.

LAND SETTLEMENT IN 1915-1916

New South Wales. — The annual report of the Lands Department for the year ending 30 June 1916 shows that in that year 2,279,417 acres of land became available for settlement in New South Wales. Areas aggregating 1,345,218 acres were withdrawn from long leases and 535,478 acres were resumed. Four estates were acquired under the Closer Settlement Acts. In all thirty-four estates, providing 1660 farms, were acquired. Forty-six of these farms, comprising 41,637 acres, were vacant on 30 June 1916.

The following figures show the progress of settlement on the various estates acquired under the Closer Settlement Acts: — Number of farms allotted, 1609; area allotted, 748,573 acres; persons resident, 7,410; area prepared for cultivation, 357,591 acres; value of improvements, £1,149,802; value of plant and machinery, £326,844; number of horses, 17,584; sheep, 191,924; cattle 12,610.

The report of the Western Land Board states that, owing to the continuance of drought and the absence of so many men at the war, there was little demand for land in the western division. Seven new leases were issued and concerned an aggregate area of 29,936 acres. The receipts for the year amounted to £90,073 and the expenditure to £10,518.

Victoria. — As regards Victoria the report of the Lands Department for the year ending 30 June 1916 states that the absence on military service of a large proportion of the young men of the State was a grave deterrent to new settlement. The following figures show its progress in the year: — 568 holdings aggregating 101,556 acres, exclusive of Mallee land, newly selected; 238 holdings of Mallee land, aggregating 140,325 acres, newly selected; 146 holdings aggregating 46,522 acres selected out of grazing area leaseholds; 179 holdings aggregating 3,175 acres converted to selection tenure.

There was an appreciable decline in the demand for Mallee land.

It was hoped in the early part of the year that the exceptionally large wheat harvest would result in considerable payments of the arrears of rent due to the department, but against this the war conditions operated. These arrears on 30 June 1915 were on crown lands, £49,233 18s. 5d. and on Mallee lands £127,184 1s. 5d.; and on 30 June 1916 they were £45,141 on crown lands and £140,060 on Mallee lands. Not less

than one third of the amount advanced for the purchase of seed and fodder should have been a charge on the returns of 1915-1916, but the ministry decided to make no deduction from the advance of 2s. 6d. a bushel, and to defer the collection of instalments until a further amount, or dividend, should have been paid. This concession seriously reduced the amount received as repayment of advances. Up to the end of the financial year a sum of £95,535 was repaid out of the total sum of money lent in the previous year, £516,000. Of the balance one third is payable from the 1916 harvest and one third may be carried on to the next year. For the year 1916 the number of crop liens registered was 3,032.

BRITISH INDIA.

THE COLONIZATION OF CANAL LANDS IN THE PUNJAB. — VAN BURREN Henry L.
in *The Tropical Agriculturist* Vol. XI,VII., No. 6, Peradeniya (Ceylon), December 1916.

The south western Punjab is part of a vast desert which may be said to extend from the Sahara to Manchuria. It supported only a sparse and nomadic population until 1849, when the British annexed this part of the Punjab, and colonization of its desert wastes was not seriously thought of until 1885 when a policy of canal irrigation was initiated.

Five great perennial canals, which together irrigate a wheat area rather more than twice the size of Ceylon, were then taken in hand. One of them, completed in 1892, commands three and a third million acres, three fourths of such area being State property, and irrigates over two and a half million acres a year. The capital expended on it was 300 lacs of rupees (1) which now bring in interest at the average rate of about 28 per cent. Another canal which was finished about 1911 irrigates some three quarters of a million acres and pays interest on the capital invested in it at the rate of more than 10 per cent.

Before 1892 the population of the Lyallpur district could not have been more than 2,000. In 1912 it had increased to over 850,000.

To settle so large an agricultural population was no easy matter. The problem needed wise statesmanship, a very intimate knowledge of the peasant farmer and his ideas, enthusiasm and a kindly sympathy. That these are of more importance than the principles on which projects and schemes were based should be emphasized. Thus Sir James Douie writes: — "The colonies have been admirable training ground for the ablest of the younger Punjab officers. It was necessary to give them a pretty free hand, the work was novel and important, and involved great responsibilities. While he was controlled from outside, the colony officer inside his colony had to be a benevolent autocrat. Autocracy is tolerable when the autocrat is content to be also the servant of his people, and in this respect the Punjab officers did not show themselves lacking".

(1) 1 lac = 1,00,000 rupees; 1 rupee = 1s 4d.

It must not be thought that no mistakes were made, for the problems were novel and at times very difficult. Nor must it be thought that there were no setbacks. Plague invaded the province in 1897 and broke out virulently in the canal districts in 1904 and 1907. Outbreaks of cholera were also frequent. In 1905 crops were injured by frost and almost the whole crop of cotton was destroyed by the boll-worm.

The settlement scheme has now passed the experimental stage and stands out as one of the most notable achievements of British administration in India.

Sir James Lyall's name will always be associated with this work. He gave his conception of a scheme of colonization thus : — " An attempt should be made to establish estates owned by bodies of peasant proprietors. [The Punjab is chiefly a country of small holdings]. In the eastern part of the Punjab and in the sub-Himalayan tracts there are found not infrequently villages peopled by agriculturists of the best type, who have increased in numbers until the lands which they own are insufficient for their support ; often the owners of such estates have been accustomed to cultivate as tenants in neighbouring villages. But, owing to the owners of those villages now requiring the lands for themselves, (they) are gradually being ejected. It would improve the general condition... if some of the proprietors would emigrate to other countries... A number of men of this class might be induced to settle in the Gujranwala Bar by being allowed to migrate in bodies... formed by themselves, and by the promise on certain conditions of grants of land ... The experiment might be tried in the following way.... Go to places in the thickly populated districts, where groups of adjacent villages are owned by men of the same clan, and.... search among them for men of some amount of enterprise, capital and influence, and ask such men..... to lead down bodies of men of their own clan to the government lands irrigated by the canal. Well selected blocks would be made over to the bodies so migrating. The leader of the colony would be given an interest in its success not only by receiving a share in the proprietorship but also by his being made headman of the new estate ".

Sir James Lyall thought it " essential to preserve the tradition of the Punjab as a country of peasant farmers ". He however made three kinds of grants. " Yeoman grants " were to attract a class above the ordinary peasantry — the middle class. " Capitalist " holdings were granted so as to supply " natural leaders for the new society ". It is interesting to note that yeoman and capitalist grants have been given up. Grants of land to native officials for meritorious service are condemned as a result of experience. Grants are occasionally made, however, to members of the hereditary landed gentry. The peasant farmers' settlements were most successful, and from settlers on them leaders and captains of industry are gradually arising.

The system of allocating land now approved is to give each peasant a rectangle of twenty-five acres. On fulfilling the conditions of the lease he can, after five years, acquire a permanent right of occupancy, which can be converted into ownership if he pay the market value of the land, as de-

duced from auction sales, less a fixed percentage. The purchase money may be paid in instalments which may extend over thirty years. Until it is paid the settler remains a tenant, and pays R. 1 an acre, in addition to water rates, land revenue and cesses.

The pioneering attempts to colonize the land allowed the settler, after five years and on fulfilling the terms of the lease, to acquire ownership by paying only Rs. 3 an acre. Subsequent modifications were due to the eager competition for the land after pioneering difficulties had been overcome.

Before the land was let out on leases contour maps of the irrigable lands were made and the areas served by separate water-courses defined. Village areas were made to coincide with water-course areas, and each village was subdivided into squares or rectangles which formed the units for allotment. It was found necessary later also to survey the soil before allotment; for there must be discrimination between good and mediocre land and land too poor for cultivation, if it be desired that water-courses should not be carried uselessly into land not worth irrigating, and many difficulties raised.

The selection of peasant settlers, their location on the land and care for their future welfare are by no means the least part of the scheme, but may on the contrary be said to sum it up. It is to work of the kind which has been emphasized that the success of this colonization is largely due.

BRITISH WEST INDIES.

THE PROGRESS OF LAND SETTLEMENT IN GRENADA.

The Report of the Agricultural Department for 1915-1916 shows considerable activity in Grenada in the matter of land settlement. The government acquired the estate known as the St. Cyr Mountain Lands, situated about ten miles from St. Georges, for £2,184, which sum with the cost of a survey and of road construction and other expenses brought the total cost up to £3,597-10s. The roads for the purpose of giving access from every lot to the by-ways of the district cost £235 and their total length was three and a half miles. Their construction, and that of a connection, one and a half miles long, between the Beauregard and Adelphi by-ways, were carried out by the Agricultural Department.

Thirty-six lots bear cacao or mixed cacao and nutmeg trees on a quarter of an acre or more land, on their entire area in only a few cases. Other eighty-four lots are bush or forest land. The average area of a lot is two acres.

The lots on which there is cacao were sold at from about £14 to £35 an acre, according to the number and condition of the trees; the uncultivated lots at £10-10s and £12 an acre. Purchasers of the more costly lots, which contained cacao, had to pay a deposit of at least 1s 3d and the balance of the total price in five annual instalments. The uncultiva-

ted land was sold on the usual land settlement terms. One fourth or one twelfth of the price was deposited : and the balance is to be paid when a fourth has been deposited, in nine annual instalments of which the first falls due three years after the allotment ; and when only a twelfth has been deposited, in eleven annual instalments beginning a year after allotment. Interest is charged on all unpaid instalments at the rate of 5 per cent.

A special committee of the district board of St. Andrew's parish, in which the settlement is situated, co-operated with the Agricultural Department in selecting desirable settlers. Two hundred and ninety-one applications were considered.

The superintendent's report on the valuation of the lots for sale was submitted in March 1915. The first applications were dealt with in April, and by the end of the year under review practically all the lots had been allotted and occupied. They are being worked, except a few of those occupied lately, and on some very good progress has been made. These results are on the whole very satisfactory, and are proof of the activity of the Agricultural Department even in its present understaffed condition.

The estate is well watered by four tributaries of the Fond Perdu River ; and the climate is damp, the annual rainfall being estimated at 100 inches. The soil is mostly a fairly deep loam, dark brown in colour, and the subsoil red clay, interspersed with boulders about two feet below the surface which crop out here and there. The subsoil is rather close in texture, but the surface soil is fairly friable and therefore can be improved by tillage and drainage. It is well suited to the cultivation of ground crops. The cacao can be considerably improved, particularly by draining the land and adding organic matter to enhance its permanent fertility. The estate is fertile except in the south-east corner. It has two warm mineral springs, one at the west end and one in the river.

FRANCE.

AGRICULTURAL WAGES DURING THE WAR. — Communication made by M. Paul Vincey to the *Académie d'Agriculture de France* at the meeting of 21 March 1917.

M. Paul Vincey resumes as follows the facts as to the increase in agricultural wages which has occurred during the present war in the district of Paris, more particularly in the three departments of Seine, Seine-et-Oise and Seine-et-Marne.

As is the case everywhere in France mobilization has reduced the available supply of labour by the enormous amount of two thirds, or even perhaps three fourths.

For reasons easy to understand the production of the labourers who have remained on the soil or have come to it — old men, women, children, refugees from the north, soldiers on leave — has also diminished markedly, apparently by one third as compared with the normal production before the war.

The following table shows for the three years 1914 (before the war) 1915 and 1916 and the district under consideration the average wages of persons lodged and fed and otherwise, paid by the day, the month and the piece, and employed on the special works of dressing and uprooting beetroot and of the hay and corn-harvests.

These wages are paid in the three departments within the district considered. It should be remembered that in Seine wages are generally higher and in Seine-et-Marne lower than in Seine-et-Oise, where they reach an intermediary level.

Agricultural Wages in the District of Paris.

Class of Labourer	Employees neither lodged nor fed Francs (1)			Employees lodged and fed Francs		
	1914	1915	1916	1914	1915	1916
<i>Daily Wages.</i>						
Journeymen	4.50	5.50	6	2	3	3.50
Workmen	4.50	5	5.50	2	2.50	3
Mechanics	6.50	7.50	8.50			
Threshers	5	5.50	6.50			
Smiths, harness-makers, wheel-wrights . .	5.50	6.50	7.50			
<i>Daily Wages for Special Work.</i>						
Harvesters	11	13	15			
Mowers	10	12	14			
Haymakers	6	7	8			
<i>Monthly Wages.</i>						
Farm clerks	230	270	300	160	190	210
Ploughmen	150	170	180	75	90	100
Cattle herds	140	160	170	75	85	90
Shepherds	140	150	160	75	80	85
Cowmen	145	155	160	75	80	85
Farm servants {	130	140	150	65	75	80
	90	100	110	50	55	60
<i>Wages for Piece-Work per Hectare (2).</i>						
Dressing beetroot	70	80	90			
Uprooting beetroot	60	70	80			
Mowing	30	40	50			
Harvest (reaping and binding)	60	85	100			

(1) 1 franc = 9 3/5d. at par (2) 1 hectare = 2.47 acres.

These results, which were obtained by a correspondence with persons in the industry, should be regarded only as giving the averages obtaining in the Paris district. In many cases the wages in use are above or below those in the table.

For a working day the wages given as those of the employees who are fed are generally less by from 2.50 to 3 francs than those of similar labourers finding their own food. It is none the less true that the cost of food rose progressively from 2.50 francs to 3.50 francs and more for one working day between 1914 and 1916.

A comparison between daily and monthly wages in 1916 and 1914 shows a general increase of about 33 per cent.

If the diminution already cited in average production be taken into account, it appears that the real wages of agricultural labour have increased by about two thirds during the present war.

This is also the rate at which the wages of piece-work, mowing and harvesting, and in many cases those of dressing and uprooting beetroot, have increased.

In the Paris district the wages of military labourers — that is of men on leave or belonging to establishments — are as follows :

Balance (every rank)	0.25 francs
Indemnity for clothes	0.25
» » labour	1.65
	<hr/>
	2.15 francs,

that is 5.15 francs with food which can be valued, on an average, at 3 francs a day.

This rise in the price of labour is certainly the chief factor which has raised the price of the various agricultural products, as the scarcity of labour is chiefly responsible for the progressive diminution of agricultural production.

GREAT BRITAIN AND IRELAND.

WOMEN WORKERS ON THE FARM. — *Agricultural Gazette*, London, Vol. LXXXIV, No. 2243, 25 December 1916.

The suitability of women to perform many of the branches of farm and horticultural work was recognized at an early date of the war, and in order to promote their employment special steps were taken by the Board of Trade, acting in conjunction with the Board of Agriculture. The progress made in the substitution of women for men in agriculture has been slow, and is in no way commensurate with that achieved in industrial

and commercial occupations. The difficulties attendant on the work have been most serious. Prejudice on the part of the farmers, reluctance on the part of the women, insufficiency of housing accommodation, lowness of wages, have all proved serious obstacles.

To try to overcome these difficulties, a campaign of propaganda work was instituted in the spring of 1915 by the Board of Agriculture and the Board of Trade. As a result of the combined action of the boards, local voluntary committees, known generally as Women's County War Agricultural Committees, have been formed. At the present time there are sixty-three such committees, whose function is:

- 1) To carry on propaganda work to promote the employment of women in agriculture.

- 2) To register women, and arrange for placing them in work and for their training where necessary.

- 3) To increase the production of home-grown food in every village.

The organization which it has been sought to establish has been in the nature of a county committee working through local committees or village registrars — the usual procedure being to divide the county into districts, each having a representative. The representatives form the county committee, in charge of the general organization, and each of them is responsible for the work carried on in his or her own locality by means of a district committee or a registrar, or both, appointed in each village. There are now 1,060 district representatives and 4,000 village registrars. In some cases the Women's County Committees have a separate existence, although they work in co-operation with the men's County War Agricultural Committees, called into being by Lord Selborne in August 1915. In others they are sub-committees of the War Agricultural Committees.

A certificate has been issued to workers at the discretion of the committees, at the time of registration or only after proved service, or in some cases not at all. After they have completed thirty days' service on the land, registered women are entitled to wear a government armlet of green baize which bears the royal crown in scarlet. 72,021 certificates and 62,000 armlets have been issued.

It has been very difficult to obtain statistics from the committees and such as they have supplied are not reliable. The approximate returns indicate that nearly 140,000 women have been registered, including all who have volunteered both for whole and for part time service. In certain counties — as Northumberland, Wilts, Devon, Kent and parts of Lincolnshire — and also in Wales, women have always been on the land in large numbers, and many of these do not care to register as they think that by so doing they may make themselves liable to some form of compulsory service. In one of the divisions of Lincolnshire, for instance, 599 women have been returned as registered and 2,041 as working; and in many villages the registrars can give no accurate idea of the number working as the farmers so frequently make their own independent arrangements. It appears that the comparatively small demand by

farmers for the service of women up to the last few months has been due in the main to the following reasons :

- (1) The number of farm labourers exempted.
 - (2) The fact that the shortage of labour has been largely met by :
 - a) Release of soldiers.
 - b) Release of school children.
 - c) Increased use of machinery
 - d) A lower standard of cultivation.
 - (3) The unwillingness on the part of large numbers of farmers to employ women.
 - (4) The difficulty of providing accommodation for imported women.
- The housing problem in rural districts, already existent before the war, has been much intensified by the fact that the wives and families of men who joined the colours have been permitted to remain in their cottages. The result of this has been that the farmer has often been unable to replace the men either by other men or by women.

The work undertaken by the woman worker on the land is of a diverse character, and includes some occupations which do not in any way, as a rule, fall within the women's province.

The following is a list of occupations in which women have been and are now engaged in various parts of the country : —

1. General farm work — (a) cleaning land ; (b) stone picking ; (c) weeding ; (d) thistle cutting ; (e) manure spreading ; (f) singling and hoeing turnips ; (g) potato setting and lifting ; and (h) vegetable planting and transplanting. 2. Milking. 3. Stock tending and rearing. 4. Butter making. 5. Cheese making. 6. Poultry rearing. 7. Haymaking. 8. Harvesting. 9. Sheep shearing. 10. Thatching. 11. Stacking. 12. Ploughing. 13. Loading and unloading. 14. Threshing. 15. Fruit picking. 16. Hop picking. 17. Reed stripping. 18. Bark puling. 19. Timber felling. 20. Gardening — (a) jobbing ; (b) market gardening ; (c) domestic gardening ; (d) cultivating allotments and waste land ; and (e) co-operative gardening.

The experience gained during the war goes to prove that some women can do anything and everything on the land, and do it well, but that the average woman is useful chiefly for occupations 1 to 7 and for 15, 16 and 20. In numbers 2 and 3 they have shown themselves very successful.

ITALY.

1. THE INSTITUTION OF A NATIONAL LABOUR EXCHANGE. — *L'Umanitaria*, Milan, No. 1, 31 January 1917.

In order to provide for the placing of the labour belonging especially to agricultural and public works, the demand for which occurs now in one and

now in another district, the *Società Umanitaria* of Milan has instituted labour exchanges for peasants which complete the organization of the urban labour exchanges, and also — in co-operation with the office of Emigration — has set up a National Labour Exchange called the *Ufficio Nazionale di Collocamento*. The essential task of the latter is the placing of groups of labourers, that of isolated labourers being left to the office at Milan even if the demand comes from elsewhere.

The exchange places labour in Italy exclusively: outside Italy this function, in view of the necessity of estimating local conditions, belongs to the Office of Emigration. The exchange collects offers of labour by the medium of the sections of the *Società Umanitaria*, the local labour exchanges, the secretariats of emigration, the offices and chambers of labour, the trade organizations, and — where such associations and institutions are lacking — by means of correspondence. By the medium of such bodies or otherwise it should methodically collect the available labour supply. It provokes demands for labour, causing them to be directed to itself as much as possible and therefore maintaining constant relations with the ambulant chairs of agriculture, agricultural associations and committees, and — for the period of the war — with the provincial commissions of agriculture. In placing labour it takes into account the condition of labourers in the districts whence there is emigration, as well as unemployment in the various provinces, and seeks to form squadrons of labourers whose technique and territorial origin give them homogeneity. It aims at the regulation of conditions of labour by written contracts. In the case of a strike or a lock-out the placing of labour is interrupted. The exchange inspects places of employment when necessary, either before labour is allocated or while work is in course.

It proposes further to contribute, as suitably as possible and in harmony with the work developed by the *Società Umanitaria*, to raising the moral and intellectual standard of labourers in employment, and to spreading a knowledge of laws affecting labour, thrift, etc.

There is at the exchange a commission of consultation and vigilance constituted by a representative of the general confederation of labour, a representative of the federation of labourers on the soil, a representative of the building federation and a representative of the secretariats of emigration. This commission meets at least once in every three months, when it takes note of the work which has been done, makes suggestions for the better working of the exchange, and sees that labour is placed in the best conditions.

2. A GENERAL COMMISSARIAT FOR FOOD CONSUMPTION. — *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 21, 26 January 1917.

To guarantee to the policy with regard to consumption the largest, the most prompt and the most effective development, in relation to the neces-

sities arising out of present circumstances, a lieutenant's decree of 16 January 1917 (no. 76) has provided that the powers of the government to regulate the consumption of food shall be exercised for the duration of the war by a committee composed of the Ministers of Agriculture, of the Interior, of Marine and Railway Transport and of War, and a minister without a portfolio.

As the organ of this committee of ministers, and dependent on it, a general commissariat for food consumption has been instituted and has the following duties : a) to requisition for the needs of public administrations and the civil population merchandise and if necessary producing establishments, fixing prices and the amount of compensation to be paid for the requisition ; b) to fix the maximum prices at which foods may be sold to the public and see that they are applied ; c) to supply imported and requisitioned merchandise to be sold to the public by the medium of local public administrations ; d) to authorize the eventual constitution of autonomous bodies of consumers (1) ; e) to regulate the sale and consumption of merchandise of which there is a manifest shortage.

The general commissariat takes the action necessary to the fulfilment of these ends and watches over the execution of all measures tending to regulate the consumption of food. It can issue ordinances for the execution of provisions regarding consumption, and can decide on any measure thus rendered necessary, according to the resolutions of the majority of the aforesaid committee of ministers to which it is directly responsible. Prefects and all local authorities must execute the ordinances and provisions thus issued. Finally the commissariat can act towards the two houses of parliament as a government commissary, in conformity with the statutes of the kingdom.

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3. THE PROTECTION GIVEN BY THE PROVINCE OF FLORENCE TO THE ORPHANS OF PEASANTS KILLED DURING THE WAR. — *L'Agricoltura Toscana*, Florence, No. 4, 28 February 1917.

Readers of this Review know that last December there was formed in Rome the *Opera nazionale per gli orfani dei contadini morti in guerra*, which

(1) The autonomous bodies of consumers are constituted and financed by the local administrations, the co-operative societies, the institutions of credit and individuals, and are destined to exercise a healthy and moderating influence and even to compel private dealers to lower prices. The commissariat of which we have spoken facilitates their task in every way for it hopes to profit by the effect of their action. There are already such bodies in the provinces of Genoa, Rome, Piacenza, Portomaurizio, Siena, Mantua, Aquila, Lucca, Cosenza, Turin, Ascoli-Piceno, etc., and many others are in course of formation. In order to hasten their legal recognition the government has issued special rules and instructions. By force of the lieutenant's decree of 11 April 1917, no. 85, the acts of their constitution are exempt from the stamp and registration duties ; and all other acts which they may pass after their constitution are subject to the ordinary stamp duties and are registered on payment of the fixed duty of 2.70 liras (1 lira = 9 $\frac{2}{3}$ d at par).

aims at promoting in Italy a complete and vast organization for helping the orphans of peasants killed in the war and giving them an agricultural training. The basis of this organization is the foundation — already accomplished — in the respective Italian provinces of special protecting agencies (1) which propose in general to assist the orphans in two ways: to increase a widow's pension when that paid by the State is insufficient, as when the number of children is excessive; and to see that the orphans have suitable instruction in agriculture and the necessary education, receiving them, when they cannot be maintained in their families or by their mothers, in special institutions — agricultural colonies — in which an agricultural training is given so essentially practical that they return to the soil capable of improving it and increasing its production (2).

Recently, by a prefectoral decree of 27 January 1917, there was constituted the *Patronato provinciale per gli orfani dei contadini morti in guerra* which has its headquarters at Florence. It proposes to assist the orphans of peasants who have died on the field or in consequence of the state of war; and small labourer proprietors and leaseholders, as well as labourers habitually employed on fieldwork, are assimilated to peasants. The assistance takes the form of a) guardianship of rights and interests; b) responsibility for the upbringing, education and instruction adapted to the childrens' condition and the kind of agriculture they will practise. Moral assistance will be given to all the orphans, material assistance to the most needy of them. To reach its ends this protective agency will secure that the orphans are as a rule left in their own families, and are entrusted, when these are non-existent or offer insufficient moral guarantees, to parents belonging to the colony or other colonists' families. The agency will promote the formation of special local committees. For its working expenses it disposes of: a) the eventual returns on its capital; b) the annual contributions of its members; c) subsidies; d) eventual donations, legacies, temporary allocations and extraordinary income. The agency has the following categories of members: a) ordinary members who engage for three years to pay at

(1) Certain of the 69 protective agencies for the orphans of peasants killed in the war, already formed in all the provinces of Italy, own a capital of more than 500,000 liras, accumulated by means of contributions from the provinces, the communes, individuals and various corporations; and others have already ensured an annual budget of more than 50,000 liras. We signalize the instance of Parma. Among the provinces Verona has already voted a budget for the orphans of 100,000 liras, Mantua one of 100,000 liras, Vicenza one of 20,000 liras, etc. For the organization of the agencies for protecting the orphans of peasants killed in the war see an article by ALFREDO FARACE in the *Nuova Antologia*, Rome, No. 1085, 1 April 1917.

(2) We would cite in particular the *Colonia Agricola Provinciale del Foresta*. This arose by the initiative of the provincial administration of Mantua which placed at the colony's disposal a holding of 37 hectares (1 hectare = 2.47 acres), and a fund of 100,000 liras, which the communes and the local bodies were called upon to form. See in this connection *Gli orfani contadini*, the monthly bulletin of the *Opera nazionale*, Rome, no. 1, 15 January 1917. Recently the *Colonia Agricola Vicentina* has also been formed with a capital of 514,000 liras arising partly out of unsolicited private contributions. See in this connection *L'Agricoltura Vicentina*, No. 2, 31 January 1917.

least 10 liras a year ; b) perpetual members who make one payment of at least 100 liras ; c) members of merit who make an annual grant to the agency of at least 300 liras. The administration belongs to a directing council which has fifteen members.

* * *

4. A PROVINCIAL LABOUR OFFICE AT ROME.

On 25 February 1916 the provincial council of Rome resolved to institute a provincial labour office, and charged a special commission to draw up the necessary rules. These rules, which have been approved, define the following as the aims of the new office : the study of the various manifestations of the economic, agricultural and industrial life of the province and the compilation of relevant statistics ; the study and regulation of the displacement of the rural population with a view to facilitating the allocation of labour ; the observation, in the interest of labour, of the phenomena of labour and relative legislative measures, with a view to taking any action which may be demanded ; the study of the conditions of hygiene enjoyed by the labouring classes, both urban and rural, with a view to promoting measures fitted to combat the diseases which attack them ; co-operation in the progressive improvement of labour, technical and economic, and encouragement of the adoption of contracts better fitted to the special conditions of the different districts ; conciliatory action when controversies arise between employers and labourers, especially where *usi civici* are concerned, and intervention by arbitration at the request of the conflicting parties ; the promotion of direct grants of land for cultivation ; vigilance for the observation and application of laws for improvements ; and finally vigilance for the observation of labour legislation.

In exercising its functions this office will co-ordinate its efforts with those of the National Office and the Communal Office of Labour.

RUSSIA.

1. GOVERNMENT AID TO HOME INDUSTRY. Правительственный Вѣстник (Government Messenger) No. 231, 29 October-11 November 1916, Petrograd.

Home industries, called in Russian *Kustárnoje proiswódstwo* (KUST = shrub, bush), have spread chiefly over the middle and northern districts of the Russian kingdom, those governments namely of which the soil is not black earth — Moscow, Tyjer, Tula, Nishni-Novgord, Vjatka etc : — and are practised by the peasants either as accessories to farming or as independent callings. They include a whole series of different and numerous forms of production : woodwork and skilled woodcutting ;

the production of linen, silk, laces and cotton; the production of fur, leatherwork, metalwork, the production of fancy articles, work in horn, pottery etc.

Present circumstances have brought certain of these industries more or less into the foreground and somewhat overshadowed others, thus adjusting all of them to the present demands of the country. The total value of the articles annually produced by home industry is about two thousand million roubles (1) and is therefore a very important element in Russian political economy.

Home industry is in Russia as ancient as agriculture, but it became an object of State care only in the seventieth year of last century, when a special commission for its study was established in the Council of Trade and Industry.

In 1888 the regulation of home industry was subjected to the supreme authority of the Ministry of the State Domains; and in 1894 to that of the reorganized Ministry of Agriculture, where a committee for home industry was called into being as part of the lately founded *Section for Agriculture and Agricultural Statistics*. This supreme authority is very notably supported by the public corporations — the *zemstvos*, the agricultural societies and the local committees established in various places.

The annual grants of the government to home industry have reached considerable sums of late years, as appears from the following figures :

Year	Roubles
1888.	30,000
1903.	100,000
1909.	492,415
1910.	773,547
1911.	1,045,826
1916.	2,429,699

For 1917 the Ministry of Agriculture is asked to give 2,459,734 roubles.

The raising of the standard of the technique of production by home industry and its development form a constant aim : trade and industrial schools are founded ; large workshops are set up ; courses of instruction are given ; museums are established ; and exhibitions are held. In 1912 there were 120 such exhibitions. The admission to the all-Russian exhibitions held in Petrograd in 1902 and 1913 was of particular interest. The formation of co-operative societies for collective supply and marketing among those engaged in home industries, the *Kustari*, is also forwarded by the Section for Agriculture and Agricultural Statistics.

In order to render possible the marketing of the products of home industry abroad, a representative of the section was sent with specimens of these products to the United States at the end of 1915. Already orders

(1) 1 rouble = about 2s. 1 $\frac{1}{4}$ d. at par.

have come from America for articles of an artistic kind produced by home industry, and a connection has successfully been made with two large American firms which have undertaken to market and to popularize goods so produced. In the spring of 1916 the section sent samples of them to the Lyons market, with most fruitful results. An important future market has thus been certainly secured.

In the course of years an office of intelligence and information is to be established in Petrograd, where collections of samples and illustrated catalogues will be found, and where all the conditions of the trade and other information regarding home industry will be communicated to those interested. It is also considered necessary to found in Paris a depository of specimen articles in which direct orders will be taken. Everything promises that such a depository will have a practically certain commercial success. The experience gained in Paris will lead to the formation of a scientifically organized market in England, in which only the articles for which there is a demand will be supplied. So soon as this organization of markets begins to develop on the right lines, indicated by the government department, the supreme authority will leave the further conduct of the enterprise to the zemstvos, who will develop still more the market for the articles produced and trace new paths for home industry.

* * *

2. THE SETTLEMENT OF KIRGHIZ NOMADS ON THE STEPPES OF TURKESTAN.
— Извѣстія Земскаго Отдѣла (*Bulletin of the Division of the Zemstvos*), No. 10, October, 1916, Petrograd.

Since the colonization of districts of Central Asia with settlers from European Russia has progressed, and railways have ensured the country's economic development, the Kirghiz — once the sole inhabitants of the vast regions of Turkestan — have little by little begun to abandon their nomadic life and settle down on the soil.

Migration having been rendered more difficult by the establishment of the Russian colonies, the Kirghiz learnt how to till and cultivate the soil from the colonists and were converted to faith in the advantages of agriculture. First owners of tents and then whole villages asked the authorities to assign to them in full ownership clearly determined lots of agricultural land, to be held by the same legal forms as those of the Russian colonists. Consequently in 1908 the Council of Ministers decided to organize the lands to be colonized in Turkestan so that they might be available not only for Russian colonists but also for the Kirghiz, and to give equal rights to the two peoples.

This measure was at first adopted only in the district of Cokcetavsc in the province of Acmolinsc, but its application was extended on 8 June 1909 to the other provinces of Turkestan.

The lots were allocated by a special office within the Ministry of Agriculture and by temporary commissions on which the leaders of the peasants and of the Kirghiz were represented. A grant to one man might not be of more than fifteen deciatines (1) of land admitting of cultivation.

734 allotments had been made on 31 December 1915 of a total area of 3,350,226 deciatines, of which 2,133,338 deciatines admitted of cultivation. On the land so granted 174,363 Kirghiz men — or 8 per cent. of the male Kirghiz nomad population — had been settled.

SWEDEN.

THE AGRICULTURAL LABOUR SUPPLY IN 1915. — *Sveriges Officiella Statistik: Arbetartillgång, arbetstid och arbetslön inom Sveriges jordbruk år 1915* (Swedish Official Statistics: The Labour Supply in relation to the Need and Duration of Work and to Wages in Swedish Agriculture in 1915) Stockholm, 1916.

The official enquiry as to the relation between the labour supply, and wages and the duration of the working day in Swedish agriculture in 1915 followed the same plan as in 1914, and made use of similar documents, namely fairly detailed forms of questions which were filled up by the presidents of communal assemblies in 2,206 rural communes, that is in 94.4 per cent. of those comprised by the enquiry.

The first question on these forms concerned the proportions of the labour supply in each rural commune. The answer should have been a general estimate, and should have indicated whether the agricultural labourers domiciled in the place, or returning to it regularly, would ensure sufficient labour for all the coming agricultural operations. The material collected shows that in 194 of the communes making returns, that is in 8.8 per cent. of them, the labour supply was good, in 1,485 or 67.3 per cent. of them it was sufficient and in 513 or 23.3 per cent. insufficient, while 14 or 0.6 per cent of them thought themselves unable to answer with certainty. As compared with those of the previous year these figures show a slight diminution in the proportions of the labour-supply — evidently due to the fact that the industrial depression produced after the outbreak of war in the autumn of 1914, which caused the supply of labour on the agricultural market to be abundant, has, it seems, gradually ceased to be felt.

The proportions of the labour supply in the various districts were very different. But the figures which indicate the number of communes in the different departments in which the labour supply was inadequate do not allow certain conclusions to be made as to the greater or less number of labourers in each department in relation to the cultivated area. What is above all reflected in these figures is the greater or less progress of agricultural organization in different places, and the greater or less abil-

(1) 1 deciatine = 2.69 acres.

ity of the employers to reduce work by using machinery and means of transport, and to make shift with the labour at their disposal by generally economical farming.

The information given as to the hours and division of labour concerns only the working-day in agriculture proper, that is to say field-work, work in barns and on threshing-floors, etc.; and does not apply to persons tending beasts, who have a considerably longer working day, chiefly passed in stables and byres.

Further as regards agriculture proper the figures supplied concern only the hours of work in summer, this word being taken in the question-form to cover the full agricultural season, that is the three summer months in which labour generally begins earliest and ends latest. As the days shorten the duration of the agricultural working day gradually lessens until it has come to be less by several hours than in summer.

The gross average length of a summer working-day in the whole country, that is to say the day including intervals for rest, is twelve hours and a half; that of the intervals is two hours and twelve minutes; and the average net working day is therefore one of ten hours and eighteen minutes. During the five years during which enquiries as to agricultural labourers have been made, it has been impossible to ascertain what changes in these conditions are due to the whole organization of agricultural labour and therefore more or less constant.

The duration and division of labour differ in the various parts of the country. If its net duration be principally considered it is seen that there are in Sweden three zones in which this is less than or equal to the average ascertained for the whole country; the zone, namely, which comprises the three departments (*län*) of Southern Sweden and the department of Kalmar, the zone formed by the departments of Gothenburg and Bohus, and that which comprises the large district of Central Sweden, extending inclusively from the department of Kopparberg to that of East Gothland. In the rest of the country the working day is relatively long.

The usual price of labour differs much with districts. Taking the country as a whole, however, the case, is as follows:

As regards the class of labourers most important to agriculture on a small scale — unmarried men and women permanently employed — the payment consists in annual money wages and food and lodging. The amount of these several forms of remuneration varies greatly with districts but the average for the whole country of the annual wage of a serving man is 343 crowns (1) in money, his food is valued at 412 crowns or 1.13 crowns a day, and his total wage is therefore 755 crowns a year. For a woman the correspondent averages are 212 crowns, 335 crowns (0.92 crowns a day) and 547 crowns. Especially in Norrand clothes are also given and their value is sometimes considerable.

Labourers who are generally married, and who under the name of *statlare* (agricultural labourers receiving mixed wages) work on the large

(1) 1 Swedish crown of gold = about 1 s. 1 1/4 d. at par.

properties in the agricultural districts properly so-called, receive, in addition to their annual wages averaging 346 crowns, a payment in kind called *stat*, which consists of milk, corn, potatoes, etc., and they are lodged together with their families; so that the average return they receive for their work is 883 crowns a year, according to the estimate of those who have furnished these data. The figure comprises the value of a free cottage, which in South Sweden generally has two rooms and a kitchen and in the rest of the country a single room. The average value of such lodging is estimated at 68 crowns and that of free fuel at 53 crowns. These data do not however concern the ordinary ploughmen. The labourers who tend live stock receive larger money wages and sometimes also larger wages in kind, so that their annual earnings are placed at 939 crowns.

Besides these labourers receiving mixed wages (*statare*) there are journeymen workmen permanently employed, who are paid entirely or almost entirely in money and whose daily wage varies much with districts. Its average amount is 2.72 crowns in summer and 2.07 crowns in winter, but is less by the average sums of 0.84 crowns and 0.76 crowns in these respective seasons, if the workman be fed by his employer.

Besides these journeymen workmen, habitually engaged for a year or at least for six months by one employer, there are agricultural labourers who take work now for one and now for another, according to the needs of the moment. In summer the daily wage of one of these casual labourers averages 3.13 crowns, in winter 2.34 crowns, if he find his own food. If he be fed by his employer he is paid on an average 2.18 crowns in summer and 1.55 crowns in winter.

Among the workpeople paid by the day there are also a large number of women, who help in beetroot and potato-growing, in the hay and corn harvest, etc. They receive on an average 1.71 crowns for a summer day's work, or 1.16 crowns with food, if they are considered as part of the farm's fixed staff. For casual work they receive a little more, namely on an average for the whole country 1.87 crowns without and 1.29 crowns with food. In the winter months their wages diminish markedly as do also those of the men in the same category.

A general comparison between wages in 1915 and in the years from 1911 to 1914 — if men tending live stock and receiving mixed wages, whose pay owing to their remuneration in kind remains almost stationary, be excepted — shows that wages of agricultural labourers of all categories increased by from 3.3 to 6.5 per cent, in 1914-1915, by from 5.2 to 10.1 per cent. in the years from 1913 to 1915 and by from 10.2 to 18.1 per cent. in those from 1911 to 1915. The increase seems to have been particularly marked in the case of the journeymen and the women employed permanently. On the other hand if total remuneration in money and kind be considered the greatest increase is seen to have been in the case of the labourers receiving mixed wages (*statare*) and the other agricultural labourers who are paid chiefly in products in kind, for the price of most provisions has risen considerably owing to the international crisis. Thus in 1914-1915 the value of wages in kind rose by about 13 per cent. and

from 1913 to 1915 by 37 per cent, which makes the increase in the value of the total wages of the *statare* labourers 9 per cent in 1914-1915 and 23 per cent, from 1913 to 1915. Compared therefore with the journeymen or with industrial workers they were much better paid than in the previous year.

UNITED STATES.

LAND SETTLEMENT IN CALIFORNIA.

The progress of land settlement in California is revealed by a report lately rendered by the Commission on Land Colonization and Rural Credits.

California has had no State land policy. The subdivision of land for settlers, the character of the settlers, the kind of agriculture and the conditions of purchase of land have all been left to unregulated private enterprise. There has been neither public control of the selection of colonists, to insure their being effective agents of rural development, nor public scrutiny of the soil and conditions of purchase, to render it certain that colonists find an opportunity rather than a temptation.

The State has an immense area of fertile and unpeopled land, only 11,000,000 acres out of the 28,000,000 acres of farm land being cultivated. Yet comparatively few settlers are going to the country and many who have arrived in recent years have left. Neither costly advertising nor still more costly personal solicitation has served to attract colonists. Progress in the country has not kept pace with progress in the towns; for in the five years from 1910 to 1915 the gain in population of Californian cities and towns was three times that of the country.

The principal causes of the arrested development seem to be the high prices of land, the high rates of interest and the short terms for payment given in colonization contracts. Under these contracts it is practically impossible to earn the money required to pay for a farm in the time usually given. Many also complain that opportunities have been so exaggerated and the expenses of developing a farm so minimized, that settlers have been induced to undertake what on trial has proved to be impossible.

It is to the interest of the whole State that its fertile lands should be cultivated and active colonization promoted. A large share of the meat consumed and many other farm products are now bought abroad; and increased production would lessen the cost of living and keep at home money now sent out of the country to pay for food. Moreover the great properties which are owned by non-residents and cultivated by tenants or by nomadic and unsatisfactory hired labour ought to be subdivided and cultivated by residents. From statistics furnished by the tax commissioner it appears that 310 landed proprietors own over 4,000,000 acres of land suitable to intensive cultivation and capable of supporting a dense population. This land would make 10,000 forty-acre farms. One firm owns

nearly 1,000,000 acres ; one railroad owns 500,000 acres ; in Kern county 1,000,000 acres — or more than half all the land in private ownership — are owned by four companies. The evils of such ownership are every year becoming more apparent. At one end of the social scale there are a few rich men who as a rule do not live on their estates, at the other a shifting body of farm labourers or a farm tenantry, made up largely of aliens and taking small interest in the progress of the community. The interests of political stability, of agriculture and of society require that this inheritance from a Mexican land system and from former land laws of the United States be abolished.

In California settlers have to pay for farms in periods of from three to ten years, while in other countries periods of from thirty to seventy-five years have been found necessary. Consequently a settler without a large cash capital or some income from another source has not been able to buy a farm. The Commissioners did not discover a single instance of a settler who brought with him only the limited capital required by State systems in other countries and was able to pay for his land within the time agreed upon in his contract.

The experience of practically every colonization company, no matter how successful, has been that it would have been better for both the settler and the company if the original enterprise had been organized on a financial basis giving the settler more money for improvements and a longer time in which to pay for his farm.

Dealers in real estate flocked to the overdone and less profitable fields of the Middle West, not to develop agriculture in California but to exploit it. It was the paradise of the boomer because it stands alone as regards rural advantages and attractions : in no other State can such a wide range of products or so many highly priced products be grown ; no other State affords the farmer or fruit grower an equal opportunity to exercise intelligence and scientific knowledge in planning his work.

But more is necessary for good results than a subdivision of farms and an inflation of land prices. Not every man is suited to becoming an orange grower or has the habits of careful thoroughness needed in intensive agriculture of any kind. To create communities like Redlands in the south or the Santa Clara Valley in the north workers of superior intelligence are required. If they be not already trained they must be willing to undergo apprenticeship in a most exacting form of agriculture which makes far greater demands on knowledge and skill than do the fertile corn and wheat growing States of the Middle West.

The best results in California can only be secured when colonization is carried out in accordance with carefully thought out plans, aimed at the creation of a definite form of agriculture or horticulture. This fact was not recognized by the speculative colonizing agent, who gave no more thought to the welfare of the community or the ultimate results of his enterprise than he would have done had he been buying or selling grain or coal. Land was to him merchandise to be bought at the cheapest price and sold for as much money as the settler could be induced to pay.

Relatively few of the men engaged in this business were knowingly dishonest but the majority of them were unthinking and ignorant. They did not know, and apparently did not care to know, how settlers were to obtain money to improve and equip the farms sold to them or how they were to earn a living income. The prosperity of the settler was his own affair. The land agent's business was to make money out of him rather than to make money for him.

An instance of the extent to which the land agent inflated prices is the case of a wheat ranch which was bought for seven dollars an acre. The buyer organized a syndicate composed of himself and his typist to which he sold the land for \$100 an acre. Then as a syndicate he subdivided it and sold it to settlers for \$200 an acre. No settler who paid this outrageous price could earn either its amount or the interest on it out of the soil. Yet sales of this character were made with ease. In part this was due to the fact that many of the buyers were also speculators. They were given evidence that land bought for seven dollars an acre was selling for \$200 an acre; the prediction was made — and did not seem incredible — that next year it would sell for \$400 an acre. The air was full of stories of the millions made by subdividing land.

This speculative colonization, which began about 1900 and culminated about fifteen years later, has now run its course. It worked infinite harm to many honest and industrious but over-sanguine and credulous settlers. It interrupted and changed the conservative and successful development which was in process when it began. It has enabled non-resident speculators to take away from the State millions of dollars as the profits of the unwarranted inflation of prices; and it has caused or will cause anxiety and heavy losses to many landowners who depend on the paying off of mortgages by settlers having neither capital nor experience. A legacy of high land prices has been left to the State; and it threatens to be a heavy economic burden, for practical and experienced farmers will not come to California if land of equal productive value in other States be cheaper.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXVII.
8TH. YEAR: NUMBER 5
MAY, 1917.



ROME
PRINTING OFFICE OF THE INSTITUTE
1917

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Part I: Co-operation and Association

BELGIUM.

THE ACTIVITY OF THE BELGIAN "BOERENBOND" IN 1915.

SOURCE:

BOERENBOND BELGE OU LIGUE DES PAYSANS (*Belgian Boerenbond or Peasants' League*).
Short report presented to the general assembly on 12 June 1916 by Canon Luytgaerens,
general secretary.

The powerful organism constituted by the Peasants' League has not interrupted its labours during the German occupation, as we will prove, rapidly sketching its work in 1915.

Speaking generally it is true that everything founded by the *Boerenbond* before the war has survived, and moreover new plans have been realized. Thus the general secretary's report notes the organization of two new agricultural guilds, one in the province of Antwerp, two in Brabant and one in East Flanders. Means of communication had hardly been re-established, in the last months of 1914, when the league's inspectors began once more to travel about the country in order to visit the rural associations and to co-operate, in the words of the report, "in reviving social and economic life in the rural districts". They were entrusted at the same time with the additional duty of collecting information and noting the most urgent needs in order to enable a directing committee to organize committees for relief and nourishment everywhere. Further as soon as it was possible the *Boerenbond*, in agreement with some influential personages in the agricultural world, undertook the defence of the interests of tillers of the soil and participated in the formation of an agricultural section of the national committee for relief and nourishment which came into being at the end of December 1914. Two of its administrators are members of this section and have taken a large part in all its work. The co-operative society, *Agricultural Assistance*, which aims at buying food for live stock and all supplies indispensable to agriculture, was founded towards the end of February; and a delegate of the *Boerenbond* is on its administrative council.

"It was not however enough to create an agricultural section for the

whole country : it was necessary also to consider agricultural interests in the different provinces. The want was best supplied by founding in each of them an agricultural sub-section, having an autonomous existence. This was done in the provinces of Brabant, Antwerp and Limbourg among others. The *Boerenbond* had its share in the formation of these three sections, within which it is represented by its delegates ”.

Until the *Agricultural Assistance* should be able to maintain agriculture with foodstuffs, manures and primary material of every kind, the *Boerenbond* itself undertook to fulfil this task and to reduce to the minimum the difficulties which the agricultural world had to meet.

“ The *Boerenbond* — or more accurately its counter for sale and purchase — bought in the first place, for the provinces of Antwerp and Brabant, the food for live stock which the German civil administration granted, at the first distribution, to agriculture in these two provinces, and remitted the food to the agricultural sections. Had there been opportunity it would have been equally zealous to render this service to the other provinces. Soon afterwards it took over from the German civil administration a sufficiently important quantity of linen oilcakes of which it afterwards made grants in accordance with the instructions of the national agricultural section.

“ In agreement with the latter it made a bargain with the *Drogueries et Huileries anversoises* for 2,500 tons of arachis and sesamum oilcakes which were distributed among all the provinces, but did not reach their destination until long afterwards because part of the merchandise was being manufactured at the time of purchase and because the formalities required for its liberation were retarded.

“ Hitherto no concentrated food whatever had crossed the frontier. Moved by the distress of agriculture the *Boerenbond* did everything possible to remedy the situation. In the course of February it was at its own request commissioned by the *Agricultural Assistance* to send a delegate to Holland to treat for the purchase and importation of 4,000 tons of linen oilcakes. This was a delicate mission but after many difficulties it was satisfactorily concluded.

“ These were the only edible oilcakes imported in 1915 in addition to the unimportant quantity bought in Holland in December 1914 by the representatives of the *Boerenbond* ”.

Thanks to these efforts Belgian agriculturists were more or less provided with various products with which to meet the difficulties in the way of feeding live stock. The *Boerenbond* then turned its attention to procuring manures.

As early as the spring of 1915 all chemical manures had been seized by the German administration. The *Boerenbond* negotiated and obtained for its members some tons of superphosphates and guano and small quantities of scoria.

It was however even more difficult to encounter the consequences of the seizure of harvests. The *Boerenbond* gave every care to regulating this matter in the best interests of its members.

“ As early as the first fortnight of July the *Boerenbond* had occasion to

formulate its desires to the German civil administration. It proposed tariffs in harmony with the general situation, giving prices at which the cultivators should themselves buy the goods they needed; and it asked that they should be allowed to retain such quantities of grain as were reasonably necessary for household and farming purposes. In this way it claimed 1000 kilogrammes (1) of oats for each horse, and in this at least obtained satisfaction since the decree ordered an allowance of two and a half kilogrammes a day or 920 kilogrammes in all. Later this quantity was notably diminished.

"For the rest, the allowance of rye for every head of horned cattle was, as is known, fixed at seven and a half kilogrammes a month or a total of ninety kilogrammes — an entirely insufficient amount.

"As regards food for the people the allowance of wheat was 340 grammes (2) a day for each person, but producers of rye might retain only a third of this amount of rye, being allowed to buy the other two thirds of their ration in wheat from the committees.

"The authorization to reserve ninety kilogrammes of rye for a head of cattle was a concession, however slight; that of utilizing this quantity at pleasure, instead of being obliged to keep one twelfth for every month until the next harvest, was another; and finally producers of rye were allowed to take out two thirds of their ration in rye. In spite of our most persistent efforts it was impossible to obtain more.

"Although here again results have not been quite equal to expectation we cannot regret having done our duty. Our guilds, which have seen their efforts partially fail on some occasions, should also argue thus, and should rejoice with us in the least success. The position of our cultivators would, without our and their intervention, have been far worse in many respects."

Thus new difficulties, affecting agriculture and the rural population, arose at every moment. The regulation of the sale of potatoes, the acquisition of seeds and plants, the struggle against the unrestrainedly audacious adulteration of foods for live stock and of manures, the efforts to obtain subsidies for the reinsurance of cattle and horses, the intervention of an employment funds in favour of unemployed workpeople — these and others were so many problems which the *Boerenbond* attempted to solve, multiplying all the necessary procedure in relation to the civil and the military authorities. Not the least arduous task was that of helping small cultivators in the districts which have suffered most from the war. To estimate damages, to combat the discouragement of the poor peasants whom the war had ruined, to draw up plans for bringing lands under cultivation and resuming the tilth of abandoned lands, to organize a system of small loans which would particularly favour those most tried, to collaborate in fact in every possible way in the resumption of work and life on this countryside ravaged by the war — this has been the essential aim which the various sections and the

(1) 1 kilogramme = 2.2 lbs.

(2) 1 gramme = 0.564 drams.

directing committee have laboriously pursued. No consideration, including regard for hygiene, has failed to influence the association's conduct and to contribute to the efforts to reconstruct destroyed villages and farms.

"We have made a point," says the report, "of rendering yet another service to the country people who were obliged to reconstruct their houses or farms. We wished to make them understand that in building it is easy for them to observe the rules of comfort and primary notions of hygiene without any consequent increase of expense. There are already in the country too many insanitary dwelling and too many farms constructed in defiance of the rules of good sense.

"A commission was nominated and it prepared in the two languages, French and Flemish, a small pamphlet, which was especially the work of Messrs. J. Giele and G. Van den Abeele and is called *Construction de l'habitation rurale et de ses dependances* (*Construction of a Rural Dwelling and its Dependencies*).

"This is a collection, as concise as possible, of explanations and practical advice on the choice and use of materials, dimensions, the distribution of space, airing and ventilation, the means of obtaining good drinking water, of guarding against damp, etc. The pamphlet is written very simply so as to be within the comprehension of all.

"The Special Commission for the Reconstruction of Farms, Rural Dwellings and Villages, created within the National Agricultural Section, wished to collaborate with us. We acceded very willingly to such request and in January the pamphlet was published under the auspices of this commission and of the *Boerenbond*.

"A copy was sent to each of our gilds and others were distributed by the care of the special commission.

"This was a first and an interesting attempt at rebuilding on our countrysides. The special commission and its provincial sections continued to study the problem actively. May their efforts result in an embellishment of our villages and in procuring truly improved dwellings for our husbandmen!"

So much as to the league's general activity. As regards the particular activity of each of the organisms within its framework, this has been no less fruitful; and we wish we could mention all that has been accomplished by the parochial gilds, the farmwives' circles, the federations of horticulturists, the counter for sale and purchase, the inspectorate of milk, the central credit fund and the insurance section. But necessarily our remarks must be limited and we will only give some figures.

We will take first the Farmwives' League. This was not only increased in 1915 by four new circles, which grouped altogether 463 members, but it has constantly kept in touch with the bodies affiliated to it, has multiplied lectures and local meetings, and has been prodigal of practical advice and instruction to its members, thus stimulating the zeal of all and giving a direction to their activity.

"The problem of feeding the people, which has so great a practical interest for women, has preoccupied the Farmwives' League to the highest

degree. It was to be feared that the population would be fed only insufficiently; for a large quantity of articles of food, all of which seemed to be of the first necessity, had been completely exhausted or had become extremely scarce. It was therefore necessary to teach our farmwives to employ the products of their farms and fields more rationally and to utilize food supplies imported from abroad. To realize this programme it was necessary to give lectures, distribute pamphlets, etc.

"The league lost no time in sending to each of its circles two copies of the tract prepared by Messrs. Giele et Van den Abeele, *Quelques conseils sur l'alimentation humaine, l'élevage et la culture des plantes* (Some Advice on Human Diet, the Growth and Culture of Plants); and soon afterwards it distributed leaflets containing recipes and practical advice on human diet.

"In February the Central Commission of Alimentary Economy was formed at Brussels, and it soon founded sections in the different provinces. From the beginning the Farmwives' League was represented on it. The chief aim of the commission was to arrange for lectures on economical diet. The league's secretary was active in the matter, especially in the province of Antwerp. Mlle. Marie Lenaire, who represents the league on the Commission of Alimentary Economy, takes charge of the organization of lectures in the arrondissement of Louvain and the canton of Vilvorde.

"At Tirlemont, Aerschot, Diest, Vilvorde, Erps-Guerbs, Haecht, Vossem, Huldenberg, Louvain and Léau meetings took place to which all local schoolmistresses and others who might be useful were invited. An initial lecture on economical feeding was given, with a practical demonstration in the shape of the preparation of some cheap and substantial meals, and the audience were begged to disseminate the ideas they received as much as possible among housewives of the people. Thus lectures on diet were soon held in every village; and the numerous reports sent to us are proof of multiple efforts in these districts to improve the popular diet.

"In order to facilitate the task of the lecturers the league, together with the provincial Commission of Alimentary Economy, published for them a *Lecturers' Vade Mecum*, of which it sent two copies to each of its circles.

"The old peripatetic school of agricultural housekeeping, which used to spend three or four consecutive months in one village, gave place in 1915 to an eight days' course of domestic economy. This consists especially in practical cooking lessons. Owing to the league's intervention more than one farmwives' circle has asked for and obtained this course, and the members have derived much profit from it. There were even some small villages in which the school was obliged to extend its courses over two or three weeks in order to satisfy all demands."

On the other hand we find mention, under the heading *Federation of Horticulturists*, of lectures and lessons in vegetable growing; of numerous collective sales on behalf of the members, bringing in a total sum of 42,260 francs; and of provision of vegetable seeds costing altogether 5,176 francs.

The balance-sheet of the counter for purchase and sale gives the following figures:

Number of orders executed	361	
Circulating funds	2,967,987	francs
Namely { Receipts	1,489,881	"
{ Expenditure	1,478,106	"
Turnover	6,205,930	"

The inspectorate of dairies was obliged on the other hand to confine its action to the provinces of Antwerp, Brabant and Limbourg, in which seventy-eight co-operative societies are at work, only seven having interrupted their activity since the opening of hostilities. A certain slackening of business, due to the diminution in membership and also in the number of cows and the quantity of milk dealt with, has however been noted. Thus in the sixty-one dairies, as to which it has been possible to obtain precise data, the number of members is said to have been lowered by 10 per cent. and that of registered animals by 16 per cent. since 1913. The cows have moreover given less milk, a natural consequence of the famine in concentrated foods. Therefore while in 1913 the average quantity of milk supplied daily was 7.165 kilogrammes a cow in 1915 it was 5.910 kilogrammes, giving a decrease of 18 per cent. Nevertheless 29,108,440 kilogrammes were dealt with in the dairies visited and 1,024,074 kilogrammes of butter manufactured.

One of the association's most active branches has been indisputably the *Central Credit Fund*.

The year 1915 was, says the report, one of the most important years it has had since its foundation. Not only was the number of affiliated local funds increased by forty-four but the savings deposits were more numerous than ever and hundreds of new small loans were made to cultivators in needy circumstances. Of 821 rural funds existing in Belgium at the end of 1915, 437 were affiliated to the central fund. At this date the number of the latter's subscribed shares was 8,987, having increased by 420 since the preceding year. The capital in shares was thus brought up to 8,987,000 francs. The funds circulated in the year amounted to 63,009,921 francs, thus considerably surpassing their ordinary level. Twenty-one new credit accounts were opened for affiliated funds, the total credit thus accorded being for 363,550 francs, which brought the amount of the credit in force on 31 December 1915 to 4,904,450 francs. The total of the savings deposits was 22,723,841 francs, having increased by 6,202,311 francs since 1914 and by 6,613,469 since 1913, the last normal year.

"This considerable increase in the amount of savings deposits in the second year of the war is partly explained by the fact that cultivators have had partially to realize their invested capital. It was impossible for them to procure the desired quantities of manures for their fields and of concentrated food for their live stock. Thanks to the reserves of fertilizing substances preserved in the soil they had generally very satisfactory harvests, and therefore had more liquid cash in hand than usual, but this was to the detriment of the wealth of the soil. They fed their live stock as they could, having no choice but to avoid the expense of purchasing the concentrated

foods usually on the market ; but the value of their stock was diminished in consequence, and the animals of which they got rid were seldom or never replaced. Analogous circumstances ruled in other branches of their farming. In a word husbandmen disposed of relatively large sums of money but the fact was not always advantageous to them.

What were they to do with these savings? Where could they invest them well, when banks and financial establishments were constantly lowering their rate of interest, and were as much as possible avoiding the acceptance of payments, owing to the superabundance of money? The husbandmen turned to the savings and credit funds. These enjoyed their confidence, and were able further, because they were affiliated to the central fund, to continue to pay interest at the rate of 3 per cent., which was in existing circumstances extraordinarily profitable for the deposits in question. It goes without saying that the fund was obliged, in order to continue these terms, to be very circumspect and to be guided not by desire for gain but by a wish to render service to the husbandmen".

Loans on land numbered twenty-seven and were of a total sum of 115,400 francs. There is further a new system of loans, particularly advantageous to the husbandmen precariously situated owing to present circumstances, and known as *small credit*, and it gave excellent results. It is as follows :

" A loan may not surpass 600 francs and is repayable in annual instalments in five years, unless the borrower formally express a desire to have this term extended to seven years, in which case he is held, during the first two years, only to the payment of the interest, which is at the rate of 2 per cent. a year.

" If as a consequence of the war the object bought with the borrowed money is destroyed wholly or partially, the debt is remitted *pro rata*, according to the loss incurred, but the borrower must prove the loss.

" He must find a third person as his surety.

" Loans are granted to countrypeople in needy circumstances, especially such as have suffered loss by the war. At first these conditions were interpreted fairly liberally, but later loans were made exclusively to persons within the following categories :

1. Husbandmen who have incurred certain definite losses by the war and the families deprived of their support.

2. Husbandmen and workmen cultivating land and having suffered a reduction, due to the war, of such external resources as wages.

" The borrowed money must serve an agricultural purpose, that is to say the purchase of live stock, small agricultural requisites, seeds, manures, etc.

" Loans are made by the medium of the local savings and credit fund or, failing it, through a committee of three or four persons duly approved by the central fund.

" On 31 December 1915 about forty of these loan committees were active.

" Funds and committees become liable for $\frac{1}{20}$ per cent. of all losses eventually suffered by the central fund from the loans they make. "

The new service of credit, thus organized, met at once with great favour which is proof of the extent to which it supplied a real need.

At the end of the year the number of these small war loans had reached 2,561 and their total value was 1,262,045 francs. The greatest number were granted in the province of Brabant where 926,020 francs were advanced to small cultivators who had suffered particularly.

The various insurance and mutual aid organizations continued to do business represented by a very respectable figure. Fire and life insurance and insurance against hail and mortality among live stock perceptibly increased the number of their policies, the amount of the premiums they received and the capital they insured.

DENMARK.

THE ACTIVITY OF THE ROYAL SOCIETY OF DANISH AGRICULTURE IN 1915-1916.

SOURCE:

AARSBERETNING OM DET KONGELIGE DANSKE LANDHUSHOLDNINGSSKABS VIRKSOMED IN
1915-1916 (*Annual Report of the Work of the Royal Society of Danish Agriculture in*
1915-1916). Copenhagen, 1916.

The Royal Society of Danish Agriculture is a private society but is recognized and subsidized by the State. It was founded in 1759 and it aims at the progress of agriculture and related industries (Article 1 of the by-laws, approved in 1872). It is one of the most powerful agricultural societies in Europe. It has about 750 members and its budget of receipts and expenditure covers about 150,000 crowns (1). Its own property amounted on 31 March 1915 to about 300,000 crowns and it also administers a property formed of legacies and other donations to the society which at the same date surpassed 400,000 crowns. By means of its resources and of ordinary and extraordinary State subsidies this society extends its activity over the most varied agricultural spheres.

A list of the departments it has instituted which were at work in 1915-1916 comprises, among others: the committee for the inspection of wheat and foodstuffs in the port of Copenhagen; the committee for superintending the schools of agriculture founded by the society; the commission for the distribution of medals and prizes in money to agriculturists and agricultural labourers who have distinguished themselves during the year; the commission for scientific book-keeping by agriculturists; the committee for the diffusion of agricultural literature; the committee for economic journeys having an agricultural aim; the committee for goat-breeding; the commission for the scientific improvement of the soil.

The society further nominates members of various State commissions concerned with agriculture; and "Tidskrift for Landekonomi", the important review of agricultural economy, is among its publications.

In 1915-1916 it proposed in particular to direct its activity towards the dissemination of scientific and technical publications on agricultural subjects; the encouragement of research in agricultural chemistry; the application of scientific principles to the breeding and feeding of domestic animals and the production of milk; the construction and use of agricultural machines; the development of agricultural industries; the subsidizing of

(1) 1 crown of gold = about 1 s. 1 $\frac{1}{4}$ d. at par.

agricultural exhibitions ; the improvement of the conditions enjoyed by agricultural labourers ; and the institution of bursaries for agricultural education abroad, and of journeys for agricultural education at home and abroad.

The importance to Danish agriculture of the society's work appears however in particular in the reports of the various committees and institutions it has founded. It will be well briefly to notice the chief among them, thus gaining an exact idea of the conditions of Danish agriculture.

A first report is concerned with the breeding of domestic animals and the diffusion of pedigree-books. These begin now to be kept, in the case of cattle, not only by large producers but also by small farmers. The task of the delegates of the society is to visit the breeders, to see that they possess registers and to inspect these, making sure that all births are registered and that the animals are entered accurately, and to establish registers for those who have none.

In the case of pigs the society has continued the experiments undertaken in its three experimental stations as to the products obtained from animals of various races. The results of the experiments are communicated immediately to the owners of the animals under observation. An immense amount of material, very important to this flourishing Danish industry, is thus accumulated at the stations.

In the case of poultry, in which Denmark has a growing interest in view of the high prices obtained for eggs and birds, the chief problems are those of feeding, artificial hatching, the cleansing of poultry-houses and the prevention of diseases.

In order that scientific principles may be applied to all of these the society's representative spent seventy-eight days in 1915 in travelling in different parts of the country, and he gave fifty-six lectures, inspected poultry-yards, planned modern poultry-yards, opened exhibitions, and responded to constant requests for advice. Many free courses were held in various districts and were well attended. An effort was made to popularize the principle that the exterior beauty of the birds should be less regarded than their yield and the purity of their race. It is remarked that electric machines for artificial hatching, the success of which seems to have been proved, are increasingly used, and that artificial eggs are used for such hatching. The society's delegates constantly exhort breeders to keep pedigree-books and regular accounts.

As regards goat-breeding the commission specially devoted to this industry was founded in 1912 and has constituted new breeding societies of which there are now thirty-four in the country. These local institutions, which the society subsidizes, hold meetings, reported in the local newspapers, for the discussion of problems connected with the industry. The commission recognizes the importance of pure-bred bucks and has interested large breeders in placing a certain number of them at the disposal of small farmers, thus obtaining noteworthy results. The commission has further made, on the most strictly scientific principles, a research into the milk provided by

forty goats of three or four different races, thus determining the content of fatty substances in relation to race and to feeding.

One of the commission's principal tasks is to give breeders scientific ideas as to the management of their animals, especially by means of newspaper articles and lectures. With this object the society has published a pamphlet entitled "Goat-breeding and Goat-keeping". It has also successfully encouraged a larger opening of zootechnical exhibitions to goats, and has formed offices for the sale and purchase of the animals which bring buyers and sellers together. The usefulness of the work of these offices has been recognized, and the number of sales and purchases effected by their means increases annually. The society now intends to institute prizes for good goat-stables, the importance of which is not yet fully understood by all the farmers.

* * *

The Society of Danish Agriculture also exercises a useful activity in the matter of milk production. It here directs its attention especially to the matter of technical education for which it receives a subsidy from the State. This amounted in 1915-1916 to 25,000 crowns, which sum was divided among 116 persons desirous of learning the methods of this industry or improving their knowledge thereof by means of bursaries allowing them to study in selected dairies inspected by the society, or to make short educational tours. The society thus limits its action to the choice of model dairies, in connection with which the bursaries are instituted; to the reception of applications from candidates and the examination of the latter, in order to discover whether they have the necessary aptitudes; to the distribution of subsidies; and to the superintendence of the progress made by bursars.

However the society has also undertaken the publication of a technical periodical, "Danske Mejerier", which has attained to a large circulation. Further on 28 January 1916 a meeting was held on the society's premises, which was attended by representatives of the society, the federation of co-operative dairies, the association of milk producers and the laboratory for testing milk. A proposal for the grant of an adequate State subsidy has been approved by the Ministry of Agriculture and is now before Parliament.

The committee instituted by the society for the improvement of land by drainage and irrigation should also be noticed. It has a technico-economic and a juridico-economic section. The latter brought forward in 1915 three proposals for the modification of the law as to public waters, and these have been approved by the society, and transmitted to the competent ministry in order that proposals relative to them may be made in the Chamber.

A form of the society's activity in the interests of agriculture is its management on behalf of the State of a service of consultation. It nominates the official of this service, whom the State must approve, and contributes to its costs. An office of consultation has been founded in the current year

for agricultural machines and implements. The usefulness of the function of the official responsible for this department appears in the fact that after several months it was necessary to place a sum of 3,500 crowns at his disposal, in order that he might pay for the services of various technical assistants, one person being no longer sufficient to meet all the demands. The rules which regulate his action prescribe that he shall keep himself *au courant* as to all progress made in the matter of agricultural machines and implements, and acquaint the public therewith in the fittest manner, experimenting therefore on the most suitable properties. He must also respond to all requests for explanations as to the matters within his competence. Every year he must send the society a report on his activity. Normally the State has no direct relations with the official responsible for consultations although he is a State functionary, but deals with him only through the medium of the society which superintends and pays him. An office of consultation has also been created in Russia. The official stationed there has those duties in relation to agriculture which fall in Italy to the commercial delegates abroad.

This new office was created in 1914. It has aimed at encouraging the exchange of agricultural products and the means of agricultural production between Russia and Denmark, and making public in the two countries the general and special economic conditions of their agriculture, at submitting proposals tending to encourage such exchange to the ministry, at answering the relevant enquiries of public bodies and of individuals in the two States, and at counteracting in the Russian press all information which might be detrimental to Danish agriculture and its products. In 1915 the delegate undertook a long journey through all Russia in order to study the conditions most favourable to the sale of grain, which Denmark produces largely, and thus to supersede in this market Germany, hitherto almost a monopolist in respect of this article of merchandise.

A long account is published in the society's annual report of this journey which had good results. The delegate succeeded in establishing commercial relations between Danish producers and Russian consumers and in concluding numerous sales of seeds of vegetables, flowering plants and trees, of animals for reproduction and of agricultural machines. For purposes of propaganda the society has published two pamphlets on experience in cultivating plants in Denmark and on several noteworthy forms of Danish agriculture. The official responsible for the service of consultation translated these into Russian and circulated them largely. As well as a series of articles in Russian agricultural periodicals, which make Danish agriculture known, he has published others in Danish periodicals, and he has personally undertaken a large propaganda for the dissemination of knowledge of the conditions of Russian agriculture. Thanks to all these efforts, and in spite of obstacles raised by the war, many Danish producers have been able to find a footing in Russia and establish with this country sure relations which will soon yield excellent results.

* * *

The society's activity in the matter of agricultural education is very interesting. Places for study are of three kinds: they are on large farms, on small farms and on farms specially devoted to stock breeding.

The education on the first of these lasts three years, each year spent on a different farm in order that the student may have a large and varied experience. His instruction is essentially practical, but the society also encourages theoretical knowledge, sending to each student a certain number of scientific manuals which remain his property after he has finally and successfully passed his examinations. In order to obtain a place a student must be seventeen years old and must already have followed a two years' elementary course in agriculture. The students receive from 150 to 250 crowns a year; they are lodged and kept and are regarded as in the employment of the owner of the farm. They must enter the work they execute in a diary and cannot otherwise obtain a final certificate. In 1915 fifty-eight of these places were assigned and sixteen certificates of completed studies were awarded.

Places for study on small farms are granted for two years. In addition to board and lodging the students receive from the owner 175 crowns in the first and 200 crowns in the second year.

Bursaries for stock-keeping always last for three years which are spent on two different farms. The owner boards and lodges the students, and pays them 175 crowns in the first, 200 crowns in the second and 250 crowns in the third year. They must do all the work they are ordered to do, learning especially to milk, to understand forage, to clean and care for animals, to kill pigs and to perform kindred tasks.

* * *

A very important share of the society's activity is devoted to scientific publications and methods of propaganda.

In 1915 it published: the periodical "*Tidsskrift für Landøkonomie*" (*Review of Agricultural Economy*); 2,400 copies of its annual report; 1600 copies of the "*Landøkonomisk Aarbog 1916*" (*Agricultural Yearbook 1916*) and various less important matter.

In order to circulate this literature of agriculture the publications were sent to 960 circulating libraries, many popular schools, the best elementary schoolmasters, and all the *Soldaterhjem* (Soldiers' Homes) depending on the Ministry of War. Moreover six lectures on various agricultural subjects were held in January, February and March.

The society has distributed a certain number of silver cups to agriculturists who have particularly distinguished themselves by transforming, by indefatigable labour almost unaided by financial resources, uncultivated land into small properties having a high yield; and has also given twenty medals to peasants and labourers, both men and women, who have shown particular skill in certain branches of the agricultural industry or who have

served their masters long and faithfully. Other prizes and medals, arising out of legacies to the society by various benefactors for determined objects, have also been awarded, and two competitions, to which prizes attach, for publications on seed-drying and horse-breeding, have been opened.

The society has a special fund of about 25,000 crowns intended for grants to poor students who have to pass examinations in agriculture at the Higher School of Agriculture and the Veterinary School. Monthly grants of no more than 20 crowns are made for the maximum period of a year. Six students received in 1915-1916 such grants amounting altogether to about 900 crowns.

* * *

Mention should finally be made of four meetings, held on the initiative of the Society of Agriculture, by its representatives and those of three other large agricultural associations in the kingdom, namely the Association of Mutual Agricultural Societies, the Federation of Co-operative Societies, and the Peasants' Association (*Husmand*). At the first meetings no more was done than amply to discuss and to vote on an order of the day addressed to the Minister of the Interior. This expressed a wish that agriculture should be more largely represented in the commissions responsible for fixing the prices of foodstuffs. At the other meetings various other subjects were discussed, such as the employment of agricultural machines, the protection of agricultural interests abroad, the formation of an agricultural office of accounts. All the meetings were well attended and their results have been very important to agriculture. Summary accounts of their discussions have been published in different agricultural reviews.

GREAT BRITAIN AND IRELAND.

THE AGRICULTURAL ORGANIZATION SOCIETY IN ENGLAND AND WALES.

SOURCE:

THE REPORT OF THE AGRICULTURAL ORGANIZATION SOCIETY FOR THE YEAR ENDED MARCH 31st, 1916. London, The Stepney Press, 1916.

§ 1. INTRODUCTION.

The Agricultural Organization Society was founded in 1901 for the purpose of advancing co-operation among English and Welsh farmers. Its work is of a twofold character :

1) It is a propagandist body — as such it seeks to spread the co-operative principle and helps in the formation of new societies.

2) It is an organizing body and as such advises and helps the societies already formed.

The co-operative societies with which it concerns itself may have one or more of the following objects :

1) They may *buy* for their members manures, seeds, feeding stuffs, implements and other articles, securing their purity and obtaining wholesale terms from the manufacturers, importers or wholesale merchants.

2) They may help to *market produce* :

a) by organizing the milk supply on a co-operative basis, thus eliminating the middlemen's profits which lower the price to the producer and raise it to the consumer ;

b) by establishing co-operative butter and cheese factories in suitable districts ;

c) by establishing co-operative depots for the collection of eggs ;

d) by grading and packing fruit in order to place it on the market in a fresh and attractive condition ;

e) by organizing the proper classing and packing of wool, thus securing a better price in the market for sheep breeders ;

f) by organizing co-operative markets and by breaking down the rings formed against the producer ;

g) by organizing the consignment of goods in bulk and arranging terms with railway companies and carriers, thus reducing the costs of transport.

3) They may hire or buy *pedigree stallions, bulls or boars*, for the use of their members at reasonable fees.

4) They may arrange for all kinds of *agricultural insurance*.

5) They may acquire land and let it to their members in *small holdings and allotments*.

6) They may establish *agricultural credit societies*.

Co-operative societies having these objects become affiliated to the Agricultural Organization Society on applying for membership and on paying a small subscription. They continue to be entirely self-supporting and self-governed but affiliation brings them many benefits. It enables them to receive copies of model rules at their time of formation, to be advised in matters of policy, to be helped with their book-keeping, and to be assisted in their negotiations with government departments, railway companies and others. The affiliated societies may avail themselves without payment of the services of the experts on the staff of the Agricultural Organization Society, whose special knowledge covers such subjects as dairy farming, eggs and poultry, wool, small holdings and allotments, accounts and the rules of co-operative societies. Finally all of them profit by the fact that the parent society co-ordinates them.

The parent society itself does no trade and makes no profit. For many years it was supported entirely by voluntary contributions, but it now also receives grants from the Development Fund in aid of its work for the general development of agricultural co-operation, and from the Board of Agriculture and Fisheries in aid of its promotion of co-operation in connection with small holdings and allotments.

As regards its organization the society has offices in Westminster and employs a general secretary. Its affairs are managed by thirty-two governors who include three nominees of the Board of Agriculture, and two each of the County Councils' Association and the Co-operative Union. Seventeen further governors are elected by the affiliated societies and of this number one fourth retire each year in alphabetical rotation. The society divides its local work among eight branches which cover all England and Wales, having their respective offices at York, Preston, Derby, Tonbridge, Salisbury, Plymouth, Bangor and Brecon.

§ 2. GENERAL REVIEW OF THE WORK IN 1915-1916.

The war has created opportunities for the Agricultural Organization Society: first because the need for national economy and the interruption of overseas trade have at last caused British agriculture to be recognized as a basic and essential industry; and secondly because the scarcity of labour, the difficulties of transport and the novel conditions of the market have brought the farmer face to face with problems which have shaken his conservatism and made him turn to co-operation as a possible solution. It was therefore possible to extend the society's enterprise in several directions in 1915-1916.

a) *New Branches.*

Two of its eight branches were formed between 1 April 1915 and 31 March 1916. They are the North Midlands Branch, which covers the

counties of Nottingham, Stafford, Leicester, Derby and Rutland and has its offices at Derby ; and the South Western Branch, for Devon and Cornwall, which has its offices at Plymouth.

b) New Societies.

In the same period forty new societies were affiliated to the Organization Society. They are distributed as follows according to their objects

Purchase of Agricultural Requirements.	17
Dairy.	3
Eggs and Poultry	10
Auctions etc.	2
Land Renting (Small holdings and allotments)	5
Credit	1
Miscellaneous	2

40

The Board of Agriculture having drawn especial attention to the usefulness of forming Village Food Societies, to increase the growing of vegetables, encourage the cultivation of allotments and gardens, and bring any pieces of uncultivated land into cultivation, the society endeavoured with success to bring several of these into existence. In some instances the Womens' Institutes filled the part of Village Food Societies.

c) Women's Institutes.

The Agricultural Education Conference on Agricultural Education for Women reported in favour of the formation of Women's Institutes which should stimulate a desire for rural education ; and at the annual meeting of the Agricultural Organization Society in 1915-1916 a resolution was accordingly passed recommending that the society should undertake the work of such formation. The services were secured of the lady who is secretary to the National Council of Women's Institutes of Canada, a country in which these institutions play an important part, and up to 31 March 1916 fourteen of them had been founded in England and Wales. It is their object " to study home economics, to provide a centre for educational and social intercourse, to encourage home and local industries, to develop co-operative enterprises, and to stimulate interest in the agricultural industry ".

d) The Supply of Produce to the Army.

The system under which the military camps obtained their supplies of fruit and vegetables was often unsatisfactory, the different units competing with each other so that prices rose while quality frequently remained indifferent. In October 1915 the Agricultural Organization Society together with the Purchasing Officer of the 68th Division, stationed at Bedford, formulated a scheme for purchasing the Division's whole supply in bulk ; and this was approved by the General Officer Commanding and was

at once put in force. The society's expert in fruit and market garden produce was placed at the disposal of the military authorities, as adviser. The result was a rapid improvement in the quality of the supply, an economy to the military authorities, better prices for the producers who profited by the elimination of the middleman, and cheaper fruit and vegetables for the civilian population since general prices fell with army prices. The matter was brought to the attention of the War Office and the Army Council has in consequence approved the gradual extension of the scheme to other camps. A new committee, called the Army Canteen Committee, has been formed to take over the powers and duties in respect of canteens hitherto entrusted to the Board of Control of Regimental Institutes; and also a Command Canteen Committee for each command. The Agricultural Organization Society is represented by its nominee on the Army Canteen Committee and on each of the Command Canteen Committees.

The necessary central purchasing body has been found in a new society affiliated to the Agricultural Organization Society, the Agricultural Produce Supplies, Limited. The Agricultural Organization Society's late expert in fruit and market-garden produce is its secretary and manager. It distributes no profits, but charges a commission to cover management expenses and returns any surplus funds to the War Office.

e) Relations with the County War Agricultural Committees and with other Bodies.

In November 1915 the Board of Agriculture notified the County War Agricultural Committees that the society had placed its services and those of its branches and organizers at their disposal; and the society itself sent them a circular letter confirming this information and drawing their attention to certain branches of agricultural work to which co-operation was particularly applicable.

The subsequent action varied in different counties: in some direct representation on the war agricultural committees has been given to the farmers' co-operative societies; in some the Womens' Institutes have been recognized as District War Agricultural Committees; in Glamorganshire the farmers' co-operative societies have been appointed to act as the District War Agricultural Committees; in Cornwall the county committee organized the supply of sulphate of ammonia through the Farmer's Central Trading Board which is affiliated to the Agricultural Organization Society.

The society has also worked in close touch with the Scottish and Irish Agricultural Organization Societies, the Housing Organization Society, the Fisheries Organization Society and the Co-operative Union, and with County Councils, Agricultural Colleges and many other public associations. Its relations with the Board of Agriculture and Fisheries have been both harmonious and important.

f) Publications.

The society's monthly journal, *Co-operation in Agriculture*, has been suspended in the interests of economy. By arrangement with the pro-

prietors of the *Smallholder* a column of that paper is however devoted every week to matter supplied by the society, and such columns are reproduced every month and sent to all who formerly received *Co-operation in Agriculture*. A proposal to issue a quarterly has been abandoned for the present; but the society has inaugurated a series of booklets, each of which will deal with an important aspect of agricultural co-operation, and which will be published at a price sufficient only to cover the cost of printing.

g) *Finance.*

The following is a summarized account of the society's expenses in 1914-15 and 1915-1916:

	1914-1915			1915-1916		
	£	S	D	£	S	D
Salaries.	6,098	9	10	6,420	14	9
Travelling and maintenance of governors and others.	2,022	1	3	2,839	18	1
Rent and other expenses connected with office.	1,100	2	10	1,147	10	2 ½
Printing, duplicating, literature.	725	8	2 ½	574	6	10 ½
Postage, telegrams, telephone.	265	16	2 ½	327	0	3
Audit fees of affiliated societies.	229	5	6	57	11	0
Egg or Poultry Demonstration Train.	—			337	8	10
Other expenses.	104	4	3	131	18	11
Total.	10,545	8	1	11,836	8	11

The society's income in the same two years was as follows:

	1914-1915			1915-1916		
	£	S	D	£	S	D
Subscriptions.	1,782	13		1,605	9	6
Donations.	56	18	6	—		
Contributions from affiliated societies.	262	16	3	382	9	3
Advertisements in Journal and Report.	126	11	0	52	5	4
Sale of Journal or other literature.	13	6	1	3	14	2
Bank interest.	13	10	7	—		
Total.	2,255	15	5	2,043	18	3

The excess of expenditure over income was therefore £ 8,289 12s 8d in 1914-1915 and £ 9,792 10s 8d in 1915-1916. These deficits were covered by government grants, as is seen in the published balance-sheets, here reproduced.

Debit	1914-1915	1915-1916	Credit	1914-1915	1915-1916
	£ S D	£ S D		£ S D	£ S D
Amount refunded to His Majesty's Treasury . .	394 8 5	1,710 7 4	Balance as per last Balance-Sheet	394 8 5	1,710 7 4
Excess of Expenditure over Income	8,289 12 8	9,792 10 8	Grants:		
Balance	1,710 7 4	183 9 4	Small Holdings Account .	2,000 0 0	1,988 0 0
			Development Fund . . .	8,000 0 0	7,988 0 0
	10,394 8 5	11,686 7 4		10,394 8 5	11,686 7 4

It is clear therefore that the Agricultural Organization Society is mainly supported by government subsidies.

§ 3. THE 'AFFILIATED SOCIETIES.

a) The Societies in General.

The affiliated societies experienced in 1915-1916 a very general increase both in their membership and in the amount of their business, and this in spite of the impediments to agriculture which are due to the war — the scarcity of labour, the difficulties of transport. The disturbance of the market has on the whole favoured the farmer; he has had to pay more for certain of his requirements but the price of his produce has risen to a more than compensatory extent, and the creation of the army has provided a new and profitable demand for his supplies. The rise in prices has naturally increased the turnover of the societies, a fact which should be borne in mind in drawing conclusions from their balance-sheets.

The total membership of the 550 affiliated societies in the year under review was 55,831 and their total turnover was £ 3,428,960. Of this sum more than two thirds, namely £ 2,450,397, belonged to the societies for the purchase of agricultural requirements, most of whom sell farm produce as a secondary business. These societies numbered 213 and their combined membership was 26,241. The following table shows the comparative importance of the different groups of societies:

Class of Society	No. of Societies	No. of Members	Turnover
			£
Purchase of Agricultural Requirements . .	213	26,241	2,450,397
Dairy	38	4,086	722,620
Egg and Poultry	29	2,996	87,954
Auction and Produce	27	2,029	140,363
Small Holdings and Allotments	177	15,975	12,434
Miscellaneous	18	3,563	15,192
Credit	48	941	—
	550	55,831	3,428,960

The following are the ten counties in which the co-operative societies had a turnover running into six figures :

County	No. of Societies	No. of Members	Turnover
			£
Suffolk	5	2,241	450,962
Yorkshire	44	2,988	373,618
Hampshire	31	4,741	246,161
Carmarthen	10	3,650	245,030
Lancashire	11	1,467	232,552
Cheshire	10	2,385	231,892
Wiltshire	27	2,221	192,412
Gloucestershire	10	1,309	158,865
Essex	9	503	158,117
London	13	3,704	129,388

The importance of co-operation in each of these counties except Gloucestershire is explained by the existence in it of one very strong society. In 1915-1916 a co-operative society for the purchase of agricultural implements in each of the first six of them, and a co-operative dairy society in Wiltshire, in Essex and in London, had itself a turnover running into six figures. In Gloucestershire several societies of secondary importance were responsible for the large turnover.

In the report of the parent society the affiliated societies are criticized for their frequent lack of sufficient working capital. "Hardly any

society has as much as it could usefully employ and in many progress is retarded because the management is hampered by want of money... The real necessity for it has not hitherto been fully realized. It is in truth extraordinary on what small capital some societies have built up large turn-overs.... The system of working through central and branch depots is gaining more and more favour in the case both of trading and of produce societies. For this and other reasons more capital is desirable". As a supplement to the issue of loans many societies find it convenient to invite loans from members, repayable at a certain notice and carrying regular interest.

The societies do not aim at making large profits in order to pay dividends to their members, but generally prefer to return the benefits which accrue from co-operative purchase immediately, in the form of lower prices, merely retaining a sufficient margin to secure against loss. However an increasing number of societies find themselves in a position at each year's end to grant members, as a bonus, a small sum in the pound on the goods sold. The system tends to increase both membership and the amount of business done.

By a clause in the Finance Act (No. 2) 1915 excess profits are computed in the case of co-operative societies not on the basis of the total profit of a society but on that of the individual profit accruing to each member. This provision is most important, for the increased profits made by many societies since the war are entirely due to an increased membership.

b) Small Holdings and Allotment Societies.

As regards societies of this type progress is shown in the number that were formed during the year, but the total acreage they held and the number of their tenants diminished. The reduction in acreage is probably due to the expiry of leases and to the increased demand for small allotments, to be made into gardens by town workers. A considerable number of new societies were formed for the purpose of acquiring land for such garden allotments, and most of these were registered in the latter part of the year and had not yet acquired land when the report was made.

The following comparative data should not therefore be taken as indicating any real retrogression. The figures for 1914, which are taken from the Board of Trade Labour Gazette are incomplete, since they concern only 147 societies whereas 172 were registered in that year by the Agricultural Organization Society.

	1914	1915-16
Number of Societies.	147	177
" " Members	16,205	15,975
" " Tenants	12,234	10,498
Acreage held.	15,432	14,646

c) Agricultural Credit Societies.

The forty-eight co-operative credit societies lent during the year the total sum of £1,087. This is a very limited success and one which has little relation to the demand for credit : many farmers, small holders and others are seriously hampered because they cannot obtain temporary loans on easy terms. The Agricultural Organization Society decided in 1915-1916 on an investigation into the causes of the slow progress of agricultural credit societies.

d) The Agricultural and General Co-operative Insurance Society.

This is the single insurance society affiliated to the Agricultural Organization Society. The year 1915 showed an increase of 25 per cent. in its premium income and the gross sums insured against fire amounted to over £4,000,000. A 5 per cent. dividend was declared on shares and a bonus of 5 per cent. on life premiums. The net claims on account of fires were considerably higher than the average of recent years, so, although the society had worked at a profit, no bonus was declared to the holders of fire policies in accordance with the practice which has been such an interesting feature in the society's work since its formation. In consequence too of the unsettled state of the investment market, the investment reserve fund was increased, and the balance remaining was carried forward.

e) The Farmers' Central Trading Board.

This board is a central wholesale establishment for all kinds of agricultural requirements and it receives applications for membership from societies affiliated to the Agricultural Organization Society. In 1915 it absorbed the Agricultural Co-operative Federation and its headquarters were then transferred to London.

It quickly became apparent that since many districts obtain their agricultural supplies from other ports than London some local organization would be useful. North-Western, North-Eastern and Welsh Sections of the board therefore came into being.

The increase of sales in 1915 was satisfactory and they promised to be yet more considerable in the following year.

§ 4. A DIRECTION OF FUTURE EFFORT

The Agricultural Organization Society is especially desirous of promoting in England and Wales continuous crops and the co-operative ownership of farm implements. To this end Mr. T. Wibberley, who had had much experience of such work in Ireland, was sent on a lecture tour through the English and Welsh counties in the winter of 1915-1916. We quote from his report :

" Undoubtedly in comparison with other English industries agriculture is in many places very backward, but the recognition of this fact by

those engaged in agriculture is the first essential step towards progress. As to the progress made and likely to be made, it was with pleasurable surprise that I found a number of farmers at practically every place I visited who, from the somewhat meagre writings which so far I have been able to put before the public on the subject, have during the past few years been growing continuous crops, on what they call a small scale and what we in Ireland would call a very large scale. From the information so obtained it is very evident that the system with adaptations is just as suitable for English as for Irish conditions — in Wales and the south western districts of England even more suitable.

“ Again as regards the co-operative purchase and use of implements, the recent introduction of motor and motor implements into agricultural work has opened up a vast field for development in this direction on the part of the bigger farmers. On the other hand the spread of the Small Holdings Act calls for — even demands for the success of the Act — a far more extended use of modern machinery, which in the case of the smallholder must be purchased and used conjointly... Already several both large and small implement societies have been formed or are in the process of formation. There are difficulties in the way, the chief one being the extreme difficulty which some societies are meeting in the procuring of machinery — a difficulty which I have tried several times to focus attention upon, and one which it is to be hoped will shortly receive the serious attention of the authorities concerned ”.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES,

GERMANY.

SOME FACTS AS TO THE CO-OPERATIVE MOVEMENT IN GERMANY. — *Jahrbuch des allgemeinen Verbandes der auf Selbsthilfe beruhenden deutschen Erwerbs- und Wirtschaftsgenossenschaften e. v. für 1914. XVIII Jahrgang, Berlin, 1915.*

On 1 January 1915 there were 117 central and 36,032 ordinary co-operative societies. More than half of these — 55.4 per cent. — were in Prussia. The number of central co-operative societies had not changed since 1 January 1914, but that of the others had increased by 1,006. All or almost all this increase dated however from the months before the war. The increase between 1 January and 1 August 1914 was one of 941 which is to say that between 1 August 1914 and 1 January 1915 it was only of 65. It should be noted that between 1 January and 1 August 1915 it was of 122.

As compared with preceding years 1914 showed lessened progress, the increase having been 1369 in 1913, 1676 in 1912, and 1426 in 1911. The increase of 1006 in 1914 was not equally distributed among the various kinds of co-operative societies. It included 400 credit societies, 168 trade societies, 199 societies for the purchase of primary materials, 116 breeding societies, 69 house-letting societies, 52 rural producers' societies, and no important number of any society of another kind.

The total number of 36,032 co-operative societies was distributed as follows :

1. Credit societies	19,700
2. Societies for the purchase of the primary materials of industry.	846
3. Rural societies for the purchase of primary materials	3,167
4. Merchants' societies for the purchase of merchandise	306
5. Consumers' societies	2,418
6. Societies for the purchase of agricultural machines.	22
7. Labour societies	2,368
8. Producers' societies	4,555
9. Breeding societies	396
10. Societies for letting dwellings.	1,538
11. Various societies.	716
Total	<u>36,032</u>

As regards form of liability the societies were distributed as follows:

- | | | | | |
|--|--------|----|------|-----------|
| 1. Unlimited liability societies . . . | 21,849 | or | 60.6 | per cent. |
| 2. Societies to which new payments | | | | |
| were unlimited | 168 | " | 0.4 | " " |
| 3. Limited liability societies - . . . | 14,015 | " | 39 | " " |

The unlimited liability societies were diminishing while the percentage of societies having limited liability was increasing. In 1905, 68.8 per cent. of the societies had unlimited and only 30.6 limited liability. Unlimited liability prevailed in 1915 among the credit societies, 87 per cent. of which had this form, and among the rural producers' societies of which 65 per cent. had it. Limited liability predominated on the other hand among all the others, especially among the trade societies, the merchants' societies and the producers' societies.

ITALY.

1. A MEETING OF THE REPRESENTATIVES OF THE CATHOLIC ECONOMIC ORGANIZATIONS OF THE SOUTHERN PROVINCES. — *Azione Sociale*, organ of the *Unione Economico-sociale fra i cattolici italiani*, No. 17, Faenza, 15-31 December 1916.

Under the auspices of the Economico-Social Union of Catholic Italians and on the initiative of *Federazione Bancaria Italiana* (1) in agreement with the *Federazione Italiana delle Casse Rurali Cattoliche*, a meeting of representatives of the Catholic economic institutions of Southern Italy was recently held at Rome. Its object was to find practical means of intensifying Catholic economic activity in the south. The organization and the present condition of the Catholic banks and the rural funds and agricultural union of the provinces of the district were examined, and discussions were held as to the methods best adapted to promote their development and co-ordination. As regarded, in particular, the banks, this meeting decided to entrust to the *Federazione Bancaria Italiana* the task of: a) promoting and bringing to a conclusion action for the formation of provincial or local institutions of credit in the most important centres; b) facilitating the transformation of existing banks from co-operative limited liability

(1) This federation of Italian Catholic banks was formed at Milan "in order to afford reciprocal protection, vigilance, co-ordination and assistance to each bank in its autonomous exercise of economic activity". The bank discharges the following functions by the means of a federal committee: a) it visits federated banks and causes their inspection at least once a year; b) it acts as an intermediary relating them mutually in order to ensure that the activity of each harmonizes with the collective interest; c) it endeavours to make them take opportune measures for the avoidance and defeat of the moral and financial difficulties which they may encounter; d) it assists and represents the federated banks where their general interests are concerned.

societies to simple limited liability societies, facilitating the desired increase of their capital; c) helping these banks to perfect and complete the branches of their activity, actively relating the interests of the various Catholic institutions, etc.

As regards rural funds we should state, as does the report, that in these provinces "there are numerous Catholic rural funds but all of them do not fulfil the objects for which they were founded". In order to intensify the movement it was therefore judged necessary to reinforce, co-ordinate and improve it. For the execution of this work of organization the *Federazione delle Casse Rurali Cattoliche* of Bologna had long delegated the *Credito Centrale* of Latium which, in view of the fact that it is an institution federating the Catholic economic institutions of the Roman and adjacent provinces, was particularly fitted for the task. The meeting noticed the action taken by the *Credito Centrale* of Latium, which promoted the formation of provincial federations of the rural funds of Reggio in Calabria, Salerno and Benevento, and, with a view to collaboration entered into relation with those of Cosenza and Amatrice; and which caused various reunions to be held in other provinces. The meeting therefore confirmed the mandate of the *Credito Centrale*. It then decided: a) to work for the constitution of legally founded federating centres in regions where none exist, preferably in provincial capitals, and where this is impossible to make the strongest and best administered rural fund in a given zone its federating centre; b) to cause all federations to correspond with the *Credito Centrale* of Latium which will act as their intermediary in their relations with the *Federazione italiana delle casse rurali* and afford them particular assistance in technical, legal and fiscal matters, facilitating all their financial business; c) to cause all Catholic rural funds, in order that they may completely discharge their social and economic function, not only to afford cheap credit but also to facilitate active habits of thrift among the agricultural classes. Such action will place at their disposal a sufficient amount of deposits and thus allow them to be maintained and to discharge their functions by means of local resources. If their resources prove insufficient the local federations will undertake to supplement them, taking all desirable precautions.

There was question at the meeting of the organization of agricultural unions (Catholic societies for the purchase of article useful to agriculture). In the south there are very few of them (at Benevento, Campobasso, Sulmona, etc.) although they could very usefully assist the development of local agriculture. The meeting recognized their importance and deliberated concerning them, and then decided: a) to work for the constitution in legal form of agricultural unions, either provincial or regional, which would operate in centres where their influence is least strong and bring into being efficient societies for the protection of the moral and economic interests of agriculturists; b) to take action causing these agricultural unions not to confine themselves to the collective purchase of merchandise and manures necessary to agriculture, but to undertake also the export of products of the soil, entering therefore with this object into relations with the Catholic agricultural unions of North Italy. For the execution

of this work the action of the national federation of agricultural unions, which has yet to be founded, will be necessary. It will undertake the formation at Rome of a special office for the needed work of propaganda.

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2. THE FEDERATIONS OF THE CATHOLIC RURAL FUNDS OF THE PROVINCES OF BOLOGNA, REGGIO D'EMILIA, FORLÌ, AND SALERNO IN 1915-1916. — *Cooperazione Popolare*, nos 22-24. Parma, 31 decembrer 1916.

We borrow from *Cooperazione Popolare*, the organ of the Catholic rural funds, the following data as to the position and activity of some provincial federations of rural funds in 1915-1916. The *Federazione delle Casse Rurali e Popolari* of the province of Bologna is one of the most important Catholic federations of rural funds. A year ago it grouped 86 funds, 77 of them rural and 9 of them popular, which comprised altogether 7,541 members. It now groups 88 funds, 78 of them rural and 10 of them popular, which have 7,617 members. We here resume the general position of the federated funds on 31 October 1914, 31 October 1915 and 31 October 1916:

On 31 October	1914	1915	1916
Federated funds	83	86	88
Number of members inscribed.	7,385	7,541	7,617
Loans to members	1,870,065.74	1,810,060.95	1,581,904.68
Securities	573,565.73	708,682.33	1,067,237.34
Deposits on current credit account	863,138.91	982,745.64	1,903,131.77
Assets in coin, merchandise and miscellaneous assets	198,864.90	221,646.68	336,088.39
Total	3,505,635.28	3,723,135.60	4,888,362.18
Liabilities in interest and costs for 10 months	106,660.98	110,691.64	130,208.02
Total	3,612,296.26	2,833,827.24	5,018,570.20
<i>Liabilities.</i>			
Trust deposits	3,276,908.17	3,455,818.73	4,649,820.76
Current debit accounts	60,122.85	57,667.31	17,376.33
Interest not due and various liabilities	24,810.77	42,771.98	40,645.05
Total	3,361,841.79	3,556,258.02	4,707,842.14
Society's capital	125,528.37	147,315.14	167,788.97
Total	3,487,370.16	3,703,573.16	4,875,631.11
Assets in interest and profits for 10 months	124,926.10	130,254.08	142,939.09
Total	3,612,296.26	3,833,827.24	5,018,570.20

This table shows above all a constant increase of deposits which is proof of the confidence felt in these institutions. Thus on 31 October 1914 deposits amounted only to some 3,277,000 liras, on 31 October 1915 to 3,456,000 liras, and on 31 October 1916 to 4,650,000 liras; that is they increased by nearly 180,000 liras between 1914 and 1915, and by 1,200,000 liras or an average of 100,000 liras a month between 1915 and 1916.

It should be remembered that this increase in deposits and the accompanying reduction in loans are partly due to an abandonment, on account of the war, of much agricultural and even of commercial and industrial enterprise. We may therefore expect that at the end of the war, when life returns to its normal course, deposits will diminish and applications for loans, which have become insignificant, will increase. Loans decreased from about 1,870,000 liras on 31 October 1914 to 1,810,000 liras on 31 October 1915 and 1,582,000 liras on 31 October 1916. Thus the diminution was one of nearly 60,000 liras between 1914 and 1915 and of 228,000 liras between 1915 and 1916.

If this increase in deposits be added to the reduction of loans a total sum of about 1,700,000 liras is obtained. If secondary items in the account be left out this sum comes to be one of more than a million liras which went to swell that comprised under the heading "deposits on credit current accounts in credit institutions", while nearly half a million liras was entered under the heading "securities".

As in preceding years the federation did not neglect to give assistance in technique, book-keeping and legal matters to the federated societies.

The *Federazione delle Casse Rurali* of Reggio d'Emilia groups twenty-three rural funds. We take the following data from their balance-sheets for 31 December 1915.

Capital and reserve	92,774.40	liras
Trust deposits	2,183,476.25	"
Bills held	1,279,414.11	"

In general the position of the rural funds in the province is good.

The *Federazione delle Casse Rurali* of the province of Forlì groups, according to the report presented by the presidents to the federal meeting on 8 June 1916, societies which are in an entirely satisfactory economic and financial position, in spite of the crisis due to the abnormal state of affairs.

They were able in the year in question to afford the same credit to their members as in 1915, but by a wise provision they gradually reduced their paper and then formed a reserve in the form of a credit current account at the *Banca del Credito Romagnolo* from which they receive a preferential rate. The diminution in their investments is due rather to the diminished demands of their members than to the imposition of restrictions.

The recently formed funds are those which have most increased the sum of their deposits. The others faced an alternative of increase or diminution, but increases prevailed at the end of the year, showing that

the war had notably reacted on those institutions which still enjoy popular confidence.

The punctuality of members in repaying the amounts they borrowed has been entirely praiseworthy. Loans numbered 3,025 on 31 December 1914 and had risen to 3,114 at the end of 1915. Deposits on 31 December 1915 amounted to 854,800.49 liras as against 807,901.27 liras on 31 December 1914: that is they increased by 46,899.22 liras. This increase shows that even the poorest classes, from whom the deposits emanated, were well-to-do, a fact confirmed by the diminution in loans which allowed the funds to augment their reserves in specie. The amount of the bills held was lowered from 840,450.35 liras in December 1914 to 720,809.17 liras at the end of December 1915.

The *Federation of Salerno* was founded in April 1916. It immediately undertook the formation of new funds in the vast region of Salerno and Lucania. The rural funds of Siano, Vietri-sul-Mare, Bracigliano, Castel San Giorgio, Torello, Pastena and Fosaro were thus constituted, and others are in course of formation at Eboli, Lanzara, Cioriani, Fisciano, S. Cipriano Picentino and Agliara.

* * *

3. THE INSPECTING AND BOOK-KEEPING OFFICES FOR CO-OPERATIVE SOCIETIES. — *Istituto di credito per le cooperative*. Branch at Reggio d'Emilia. Extract from the report on the balance-sheet for 1916.

The *Istituto di credito per le cooperative* of Milan founded long since and most opportunely offices for the inspection and book-keeping of co-operative societies. The reason for their existence is explained as follows in the report on the budget for 1916 of the Reggio d'Emilia branch. "The needs of co-operation become larger and more and more complex and the desire of the *Istituto di Credito* for a regulation of credit grows proportionately. Hence the necessity that there should always be at hand the material for learning the conditions of the enterprises as regards their economy and their capital in real estate. This gives a motive to all the co-operative societies to prove the value of their organizations, for it is from all of them together that operations of credit in general and of fiduciary credit in particular can derive their indispensable effective guarantees". The report cited shows the activity of these societies. In 1916 they kept the books of 54 co-operative societies and drew up their balance sheets: the office of Reggio did this for 31, that of Guastalla for 23.

The inspecting office undertook notable work. It revised 164 balance-sheets, belonging, respectively, to 67 consumers' and 97 labourers' co-operative societies; and it gave 195 consultations.

The results obtained by revising the balance-sheets were the bases for the compilation of statistics of 1914, and the like are now being compiled for 1915. If the data collected be resumed the progress of co-opera-

tion in the region of Reggio in 1914 will be seen to present the following facts :

Co-operative societies adhering to the Office of Inspection number 156 of which 74 are consumer's societies, 69 labour societies and 13 agricultural societies. The total number of members is 20,580, distributed as follows: 9,204 in co-operative consumers' societies; 8,876 in co-operative labourers' societies and 2,500 in co-operative agricultural societies.

The subscribed capital amounts to 1,755,907 liras and reserves to 738,876 liras.

The following figures represent the turnover: sales, 4,198,961 liras; work 5,845,648 liras.

The total amount of operations of credit effected by this institution of credit is as follows:

From 1 July 1911 to 31 December 1912

(18 months)	6,226,784.57	liras
In 1913	4,856,936.29	"
" 1914.	5,317,068.22	"
" 1915.	6,134,063.15	"
" 1916.	6,882,608.30	"
Total	29,417,460.53	"

These data are proof of the importance of the work accomplished and also of the useful service rendered by this institution to co-operation.

* * *

4. LA FEDERAZIONE APISTICA ITALIANA. — *L'Agricoltura italiana*, organ of the federation, Nos. 1 and 2, Ancona, January and February, 1917.

This Italian Apiarist Federation, which has its headquarters at Ancona, is a limited liability co-operative society, having an unlimited capital and aiming at the production and sale of honey and wax (1). It was founded in 1904 on a modest scale but has developed constantly, as is shown by the following table.

(1) The *Federazione apistica subalpina* is in course of construction at Turin in the form of a limited liability co-operative society aiming at a) the progress and popularization of rational apiculture; b) the improvement of members' apiculture; c) the collective purchase and use of everything necessary to the rational practice of this industry; d) the marketing of products. See in this connection *Apicoltura moderno*, Nos. 3 and 4, Turin, March and April 1917.

Development of the Federation from 1904 to 1916.

Year	Society's capital	Number of members	Turnover	Exporta- tion	Total sales	Price by quintal, including packing
	Liras		Liras	Quintals	Quintals	Liras
1904	1,314	72	2,087	—	—	—
1905	9,236	456	419,226	175	757	76
1906	10,342	534	1,392,060	385	1,606	68
1907	11,246	600	1,640,864	625	1,453	77
1908	22,798	607	1,995,906	605	2,032	76
1909	31,097	629	3,237,223	707	1,889	71
1910	35,793	658	2,608,849	1,598	2,714	74
1911	38,352	667	3,021,493	1,168	1,495	100
1912	40,764	674	2,058,948	582	1,207	98
1913	43,041	690	3,555,330	1,137	2,577	84
1914	46,731	740	4,694,611	1,420	3,741	72
1915	48,736	766	—	958	2,414	—
1916	49,343	772	—	—	2,135	—

The continually increasing membership is explained by the advantages procured by this federation, and also by a very wise provision of the administrative council that members need pay immediately only half instead of the whole amount of a share of 50 liras, paying the rest in three annual instalments.

* * *

5. THE CONSTITUTION OF LA FEDERAZIONE DELLE LATTERIE SOCIALI CREMONESI. — Bollettino dell'Agricoltura, No. 7, Milan, 15 February 1917.

Their common interests and the desirability of an interchange of advice and assistance suggested to the collective dairies in the district of Cremona the idea of forming a federation, and to this the dairies of Soresina, Acquafredda, Sesto, Forcello, Cà de Stefani, Cà de Corti and Piadena have already adhered. The federation proposes to buy on behalf of the federated societies merchandise and products for common use and implements and machines; to furnish information as to the most profitable method of treating milk and the best markets; to act in the markets as an intermediary; to constitute depositing warehouses in order to facilitate advances of funds; and to organize the sale of products and production by specialization, by improvements and by encouraging the foundation of new co-operative societies.

RUSSIA.

FINNISH CO-OPERATIVE DAIRIES IN 1915. — *Suomen Osuustoiminnin talous*; Helsinki, Year 1916, No. 10.

At the end of 1915 there were 421 co-operative dairies in Finland, twenty-one of them having been founded during the year. These societies had 45,000 members, as against 41,500 in 1914 and 39,000 in 1913. Of the members 38.8 per cent. possessed from one to three cows, 53.9 per cent. from four to fifteen, and 7.3 per cent. more than fifteen. In 1913 the corresponding percentages were 38.4, 53.1 and 8.5; in 1911 they were 37.8, 53.9 and 8.7.

The following table shows the number of cows belonging to co-operative dairies and the proportion this bore to the country's total herd from 1912 to 1915:

In 1912	the co-operative societies possessed	250,000 cows or 21.6 % of the country's herd
" 1913	" " " "	255,000 " " 21.7 % " " "
" 1914	" " " "	269,000 " " 22.7 % " " "
" 1915	" " " "	288,000 " " 25.7 % " " "

The increased percentage in 1915 was influenced by the notable reduction in the country's total herd in that year.

From the 421 co-operative dairies 316 million kilogrammes (1) of milk were obtained while in 1914 the 396 co-operative dairies supplied 321 million kilogrammes. The chief cause of the diminished milk production in 1915 was doubtless the fixing of too low prices for butter which led to the slaughter of many milch-cows and thus paralysed all measures taken to increase milk production.

As regards motive power, steam is employed by 266 dairies, hydraulic power by eleven and electricity by seven, while fifty-four are content to use human labour and forty-eight have recourse to animal traction.

The financial position of 330 co-operative dairies at the end of December 1915 was as follows:

Assets		Liabilities	
	Fra.		Fra.
In hand	739,919	Loans granted by the State .	1,144,279
Deposits and credit	4,173,229	Loans granted by the banks	
Real estate	6,131,944	and other loans	2,405,775
Accessory industries	241,250	Capital owned by dairies. . .	6,713,665
Products and plant	1,181,131	Excess of assets over liabilities	2,303,754
Total	12,567,473	Total	12,567,473

(1) 1 kilogramme = 2.2 lbs.

The financial position of the co-operative dairies is thus seen to have been excellent. The following table shows their financial development from 1904 to 1915 :

Year	Assets		Liabilities	
	Real Estate	Other property (in hand, deposits, etc.)	Capital owned by dairies	Loans
1904	83.0 %	17.0 %	23.1 %	76.9 %
1906	84.1 %	15.9 %	26.8 %	73.2 %
1908	81.7 %	18.3 %	34.0 %	66.0 %
1910	77.7 %	22.3 %	46.2 %	53.8 %
1912	67.7 %	32.3 %	60.5 %	39.5 %
1914	63.3 %	36.7 %	63.7 %	36.3 %
1915	51.5 %	48.5 %	71.8 %	28.2 %

An examination of this table will convince the reader that the development of the co-operative dairies has been continuous and rapid. In 1904 they owned hardly a quarter of the capital they employed, but in 1912 they owned much more than half thereof, namely 60.5 per cent. And while their own capital increased the proportion of their real estate to their other property was modified to the advantage of the latter ; which in 1914 constituted 36.7 per cent. of all their assets, being thus equal to their debts (36.3 per cent.), whereas in 1915 the position had much improved.

In 1915 the value of the products sold by the Finnish co-operative dairies was fifty million francs. The average income of a dairy was larger than it had ever been, namely 141,667 francs as against 110,727 francs in 1914 and 113,210 francs in 1913. But most of the dairies — 52.1 per cent. of them — have not yet attained to an annual turnover of 100,000 francs. There were at the end of 1915 nineteen large dairies having an annual turnover of more than 400,000 francs.

The average price of the products was 379.53 francs for one hundred kilogrammes of butter in 1915, as against 281.05 francs in 1914. The corresponding cost of production reached 36.43 francs and the net profit 343.10 francs. If 2 ½ per cent. be allowed for usurer's amortization a final net profit of 3.34 francs remains on one kilogramme of butter. To produce one kilogramme of butter 24.3 kilogrammes of milk are needed.

UNITED STATES.

THE ACTIVITY OF THE JEWISH AGRICULTURAL AND INDUSTRIAL AID SOCIETY IN 1916 (1). — From the society's annual report for 1916.

The activity of this society in 1916 was facilitated by the excellent economic situation of the United States and the high prices of agricultural products.

Credit operations extended into thirty-six States; 386 loans were made in the year for a total amount of \$229,827, as against 396 in 1915 for a total amount of \$190,036. Since the number of loans diminished while their total sum increased it follows that the average individual loan was larger: it rose from \$480 in 1915 to \$595 in 1916. This business brought the total number of loans made by the society since its foundation up to 4,100, and the total sum lent up to \$2,330,091. At the close of 1916 loans which had not been repaid numbered 1,713 and amounted to \$977,423.

The following table shows the chief objects for which loans were made:

Object of Loans	Number	Percentage
Purchase of a farm	47	12
" " agricultural implements	100	26
Building and repair of buildings	62	16
Repayment of mortgage and other debts	166	43
Working capital	11	3
Total . . .	386	100

Non-recoverable credit entered in 1916 in the profit and loss account amounted to \$7,227. The total sum which the society has lost under this head is \$64,217 or 3.11 per cent. of the total sum lent.

All the others sections of the society have continued to work with the same success as in previous years. The office of agricultural labour placed last year, 1,446 persons or 449 more than in 1915.

The office for co-operative purchase, founded in 1910, not only enabled Jewish farmers to obtain the products they needed at cost price, but also accomplished an educative work, teaching them to use improved machinery and new kinds of seeds, to mix manures, etc. Thanks to the efforts of this section some hundred silos have been installed in recent years. In the seven years for which it has existed the office for co-operative purchase has done business for more than \$200,000.

(1) *International Review of Agricultural Economics*, September 1916, page 1.

The first agricultural savings and loan society, organized about two years ago at Centerville (New York) had 157 members at the end of 1916 and a capital in shares of \$ 23,276. It had then granted fourteen mortgages on agricultural real estate for a total sum of \$32,800. The co-operative society for insurance against fire in Sullivan county, founded four years ago, had then issued 504 policies, still active, for a total value of \$ 1,211,395. The business of the year yielded a profit of about \$5,000.

Finally the organization department took particular interest in the application of the Federal Farm Loan Act and conducted an intensive work of propaganda in order to induce Jewish farmers to form, in accordance with the law, national associations of agricultural credit.

Part II: Insurance and Thrift

CANADA.

MUNICIPAL INSURANCE AGAINST HAIL IN SASKATCHEWAN.

OFFICIAL SOURCES :

AN ACT RESPECTING HAIL INSURANCE BY MUNICIPALITIES (Canadian Legislature) 1915, c. 22.

AN ACT TO AMEND THE STATUTE LAW, *ibid* : 1916, c. 37.

A REVIEW OF THE WORK OF THE MUNICIPAL HAIL INSURANCE COMMISSION FOR THE YEARS 1913, 1914, 1915. Regina (Saskatchewan) October 1915.

REPORT OF THE WORK OF THE MUNICIPAL INSURANCE COMMISSION OF SASKATCHEWAN FOR YEAR ENDING 29 FEBRUARY 1916, Regina, March 1916.

OTHER SOURCES :

THE AGRICULTURAL GAZETTE OF CANADA, Ottawa, September 1916.

THE GRAIN GROWERS' GUIDE, Winnipeg, 8 November and 13 December 1916.

THE PUBLIC SERVICE MONTHLY, Regina, Vol. V, No. 5, December 1916.

§ 1. THE SCHEME AS INITIATED IN 1912.

a) *The Hail Insurance Commission.*

In Saskatchewan there is a system of municipal insurance against hail based primarily on the Municipal Hail Insurance Act of 1912. This created a Hail Insurance Commission which has three members of whom the chairman is appointed by and holds office at the pleasure of the Lieutenant Governor in Council, and the other two members are nominated at a meeting of the reeves of the municipalities affected by the Act and are in office for two years. The Lieutenant Governor in Council has however power to fill all vacancies temporarily.

The constitution of the Commission was intended to secure it from political influence while making it responsible to the people, and to give it continuity. The Commissioners receive salaries fixed by the Lieutenant Governor in Council and their travelling expenses are reimbursed to them ; and they appoint a secretary-treasurer who is paid for his services as they decide. They form a legal corporation. All salaries of the Commission and its officers are paid out of the funds held by it under the Act.

b) *Qualification for Insurance.*

It is the municipalities who are insured under the Act. Any municipality in Saskatchewan may benefit by its provisions, and therefore enter the sphere of the Commission; but such participation is in every case entirely voluntary. The council of a municipality may at any meeting held between 1 August and 1 October in any year resolve to submit to the electors at the next ensuing annual election a by-law of a stipulated form empowering the municipality to insure under the Act. This will receive its first and second reading only in response to a demand made before 1 November in any year, in a petition signed by at least 25 per cent. of the resident ratepayers of the municipality; on receipt of which the council will put the by-law to the vote as soon as possible.

The right to vote on the by-law belongs to persons owning or occupying or having an interest in lands within the municipality not exempted from payment of the insurance tax.

The voting is by ballot and votes are recorded on especially provided forms. If the majority of voters assent to the by-law it is finally passed on 10 January next after the poll; and within the month two copies of it, and a certified statement as to the number of votes recorded for and against it, are sent to the minister. It is valid from the day on which a notice of the minister's approval of it appears in the *Saskatchewan Gazette* and the minister immediately informs the Hail Insurance Commission that it is in force.

c) *Assessment of Premiums.*

Subsequently the secretary-treasurer of the municipal council is obliged to publish before 1 May in every year and in two successive weekly issues of a local newspaper an intimation, according to a prescribed form, that the lands of the municipality are liable to assessment under the Act. Lands held under a grazing lease from the Dominion of Canada and lands within any hamlet are exempt; and exemption for the current year may be claimed for lands belonging to certain specified categories. Claims for exemption are made to the municipal council before 1 June, and if successful are sent by the council to the Commission, who may cancel the exemption.

All non-exempted lands of a municipality which has come under the Act are liable to be assessed by the Commission at the rate of four cents an acre. The full amount of the rate, less the cost of printing the special hail insurance tax notice and charges connected with remittance, is sent by the municipality to the Commission. The risks are thus shared equally by all the municipalities under the Act, a circumstance which gives this system of insurance its truly co-operative character.

d) *Indemnification for Loss.*

Owners and lessees of land insured under the Act are entitled to indemnification at the rate of five cents an acre for every one per cent. of damage by hail incurred by their crops between 16 June and 15 September: in other words for every acre on which the crops have been totally ruined they receive \$ 5.00. The Act of 1912 provided no indemnification for losses amounting to less than ten per cent. of the crop. Notice of the damage must be given within five days of the date at which it is sustained, by registered letter to the secretary of the Commission at Regina, and must be in the form of a full statement witnessed and verified by a neighbour. The secretary of the Commission delivers this statement to an inspector who verifies it and reports on it.

All acknowledged claims must be met by the Commission before 15 December in each year, unless the Commission consider that its revenues do not permit of full payment, in which case claims must be met *pro rata*.

No money due as indemnities can be assigned or garnisheed.

§ 2. THE FIRST THREE YEARS OF INSURANCE.

For three years the Municipal Hail Insurance Act justified most of the hopes entertained for it.

a) *The Field of Insurance.* — The manner in which the farmers of Saskatchewan took advantage of the provisions of the Act proved that it supplied a real need, and seemed to prove also that it supplied it adequately. At the first municipal elections held after the Act had been passed one hundred and fifteen municipalities voted the by-law which brought them within the sphere of insurance, and as a consequence some twenty million acres of land, of which approximately five million were under crop, were automatically insured against damage by hail. At the next municipal elections, those of the autumn of 1913, three municipalities repealed the by-law but it was passed by an additional number of fourteen, thus giving a net increase of eleven in the total number insured, which was thereafter 126. After the elections of 1914, 127 municipalities were under the Act and 22,000,000 acres or 34,000 square miles of land — of which 7,000,000 acres were estimated to be under crop — were in consequence insured for 1915. The working of the scheme in this year gave such satisfaction that after the elections in the autumn of 1915, 139 municipalities were under the Act.

The complete freedom to repeal the insurance by-law in any year probably caused it to be voted willingly, the municipalities feeling that they were not committing themselves to the system permanently but merely making trial of it. One municipality passed the by-law in 1913, repealed it in 1914 and passed it again in 1915: in this case the ratepayers paid the hail insurance tax in 1913 and 1915 but not in 1914.

It was very noticeable that the municipalities which were the later adherents to the scheme adjoined others previously in enjoyment of its

benefits. In other words this form of insurance had the advantage of the most legitimate of forms of all advertisement.

b) *The Minimum of Indemnifiable Loss.* — Under the Act of 1912 no farmer could claim indemnification for a loss of less than 10 per cent of his crop. It was deemed advisable to lower this minimum, by an amendment passed in 1915, to 5 per cent. Since the rate fixed by the Act of 1912 was five cents for one per cent. of damage, the minimum indemnity payable came to be 25 cents an acre.

c) *Withdrawal of Lands from Insurance.* — A criticism of the scheme is that it causes all lands to be taxed for insurance against hail alike, whether or not they are cultivated. Its defenders point out that this system allows the tax to be comparatively low, and moreover brings under contribution — ultimately to the benefit of the farmers — the big land companies and speculators who do nothing to enrich the country. From the beginning however certain categories of land were exempted, as has already been said, from obligation to pay the tax — in practice lands permanently under grass and the sites of villages —, and exemption for one year can be obtained for lands belonging to certain other categories. The latter were modified by the amendment to the Act passed in 1915; and as the law afterwards stood they included :

1) Lands which comprise one or more quarter sections in area, are completely surrounded by a substantial fence of not less than two strands of barbed wire upon posts not more than 33 feet apart, and are used exclusively for grazing and for growing hay, only by the person who wishes to withdraw them from insurance.

2) Unpatented quarter sections held under homestead, pre-emption or purchased homestead entry, having less than 25 acres under cultivation. The ability to withdraw these allows new settlers and others who have only a small holding of cultivated land, exclusively on unpatented lands, to avoid paying the hail insurance tax until their lands are patented or until they come to be grain growers on a large scale.

3) A patented or unpatented quarter section in which less than 25 acres is under cultivation and the remaining land fenced as described under 1). The provision for the withdrawal of land of this category is made in the interests of certain parts of the country where most of the land is grazing land and only a minor portion arable.

d) *Inspection of Damage for which Indemnity is Claimed.* — This very important part of any scheme of insurance was inevitably found to admit of improvement after experience of it had been gained.

In 1914 the Commission provided that any claimant who was dissatisfied with the inspector's estimate of the damage his crop had incurred might ask to have it re-inspected. The system of re-inspection thus inaugurated proved to be so useful that in 1915 the Commission further provided that if after re-inspection the claimant were still dissatisfied, his claims could be referred to two arbitrators, one chosen by himself and the other by the chief or general inspector, and that these, after they had inspected the crop in question, had power to call in a third person who should de-

cide points on which they could not agree. The Commission's regulations as to this provision are printed on the back of the report which the inspector leaves with the claimant after his first inspection. Only two claimants availed themselves of the provision in 1915, and in both cases the two arbitrators agreed without calling in a third person and the award was not increased but reduced.

Two general and twenty-one regular inspectors were employed in 1915, all of them then or recently engaged in farming and eleven of them reeves or councillors of a municipality at the time of their appointment.

e) *Finance.* — The following figures show the financial working of the scheme before 1916.

Year	Number of Municipalities under the Act	Net Revenue	Number of Claims Received	Amount paid in Claims	Costs of Administration
1913	115	\$ 788,389.50	5,300	\$ 756,960.11	\$ 26,928.52
1914	126	896,365.26	3,568	512,900.75	30,029.24
1915	127	917,293.96	3,991	670,809.42	35,871.51

These results were received as evidence of a great success by the Hail Insurance Commission. Nearly two million dollars had been paid to the farmers in indemnities; in 1914 and 1915 payments, aggregating \$ 35,000, had been made into a tax adjustment reserve fund; and a surplus of more than half a million dollars had been accumulated.

In the report issued early in 1916 the Commissioners laid stress on the economical nature of the scheme they administered. They stated that out of every dollar collected from the farmers 73 cents had been returned to them in the form of indemnities, 21 cents were held as a reserve fund against future abnormal losses, and only 6 cents were absorbed by the expenses of the Commission and the commission paid to secretaries of municipalities. In the case, however, of nineteen private insurance companies, which were the rivals of the Commission in the province, only 37 cents out of every dollar collected were returned to the farmers in the form of indemnities, and the remaining 67 cents went to pay expenses and make the profits of shareholders. The insurance effected by the Commission would, if it had been carried on by private companies, have cost the farmers \$ 3,000,000.00 more than had been the case.

The Commission had originally no power to borrow money except for administrative purposes. It was however deemed advisable to invest a portion of the surplus, and therefore the Act as amended in 1915 allowed the Commission to borrow money for any purpose, using its securities as collateral.

f) *Additional Insurance.* — There was some discontent with the amount of indemnities received for losses. It was stated that when a crop was en-

tirely ruined by hail the indemnity of \$ 5 an acre compensated not for the full value lost but only for the cost of putting the crop in. To meet this complaint the Commission, as empowered by the amendments of 1915, inaugurated a system by which farmers in municipalities already under the Act might, by applying to the secretary of their municipality, pay an additional rate of 5 cents an acre, and thus insure their crops for an additional \$ 5 an acre, or \$ 10 an acre in all.

Participation in the additional insurance thus initiated was naturally confined to grain growers within the 139 municipalities under the Act, and even on their part it was entirely voluntary. There was therefore a danger that risks would not be sufficiently distributed. The Commissioners stated that to guard against this they had in the first place employed agents in all the municipalities under the Act to solicit adherence to the scheme for additional insurance; and in the second place had arranged with several good insurance companies for reinsurance, in every district where risks which could not easily be faced were in the least likely to occur. The rate of 5 cents an acre was less by one cent than the usual rate, but the Commissioners claimed that this fact was justified by the economy of their administration.

According to an approximate estimate published in September 1916 the value of the additional insurance in force was \$ 2,000,000 and the total revenue from insurance \$ 1,000,000.

§ 3. THE BREAKDOWN OF THE SCHEME.

a) *The Results of 1906.*

In a review of the first three years of their labours published at the end of 1915 the Commissioners hint at a possible eventual abatement of the assessment rate of 4 cents an acre for insurance under the Act of 1912. "It is the intention of the Commission", they say, "to maintain the 4 cent assessment rate at least until the reserve fund equals one year's revenue, thus placing its finances upon a sound basis so that claims can be settled earlier in the season".

But far from bringing them nearer a point at which they can lower the rate, 1916 has proved the whole financial basis of this scheme for insurance to be unsound. The following figures summarize the business of the year:

Number of municipalities under the Act.	139		
Approximate acreage under crop insured.	7,000,000		
Number of Claims	10,000		
Amount of Claims	\$ 3,600,000	}	\$ 3,650,000
Expenses	\$ 50,000		
Revenue			\$ 950,000
Deficit on the year			<u>\$ 2,700,000</u>

In connection with this formidable deficit further remarks from the official review issued late in 1915 may be cited. "The hail insurance levy of 5 cents per acre amounting to only \$ 6.40 for 160 acres is a very small premium to carry a risk of \$ 800, which is the case where all the acreage is under crop... In other words it takes 4 cents per acre levy upon 125 acres to pay... \$ 5 upon one acre destroyed by hail".

It is instructive to compare with the results obtained by the Municipal Hail Insurance Commission those reached from 1913 to 1916 by private companies insuring against hail in Saskatchewan.

In the aggregate they were as follows :

Year	Premiums	Losses
1913	\$783,194.42	\$485,305.79
1914	747,838.68	173,443.44
1915	1,363,001.66	438,619.57
1916	1,417,853.21	1,872,408.75

The following table shows the gross income and gross losses of each company insuring against hail in the province in 1916.

Name of Company	Premiums	Losses
St. Paul Fire and Marine Insurance Company	\$ 54,802.10	\$ 86,251.54
Middle West " "	39,662.35	49,690.94
Excess " "	102,437.75	130,739.14
Acadia Fire " "	31,860.86	66,593.02
Canadian Indemnity " "	82,582.10	124,728.45
Canada Hail " "	72,542.95	95,127.67
" National " "	95,685.18	193,055.43
Rochester Underwriters' Agency " "	20,909.56	29,243.26
British American Assurance " "	48,176.13	64,539.13
Winnipeg Fire Underwriters' Agency	3,150.96	3,887.50
Nova Scotia " "	9,657.87	11,686.87
Home Insurance " "	102,646.13	176,608.61
Canada Security Assurance " "	70,898.97	83,934.80
British Crown " "	193,517.89	213,330.37
Canada Weather Insurance " "	21,420.63	17,391.56
American Central " "	18,155.41	49,823.07
Connecticut Fire " "	13,553.45	24,312.05
Hartford " "	96,360.96	112,592.95
New York Underwriters' Agency	26,192.80	30,023.13
Great North Insurance " "	60,474.21	56,780.99
Northwestern National Insurance " "	111,751.48	114,692.84
Dominion Fire " "	37,282.47	26,439.05
Glens Falls " "	80,987.46	76,827.06
Westchester Fire " "	23,143.54	34,209.32
	<u>\$ 1,417,853.21</u>	<u>\$ 1,872,408.75</u>

The expenses of the private companies in 1916 averaged 30 per cent of their premium income. Since the losses were equivalent to about 132 per cent. of such income they owed, at the end of 1916, 162 per cent. of the total amount they had received in this year. The position was sufficiently serious, yet vastly less so than that of the Municipal Insurance Commission which, in spite of its much more economical administration, would have had to pay 394 per cent. of its premium income in order fully to indemnify losses at the rate of \$ 5 an acre.

The private companies were able to meet all claims on them from their reserves. The Municipal Hail Insurance Commission was under no obligation to pay full compensation at the \$ 5 an acre rate, for a clause, already cited, of the Act of 1912 provides that if the Commission consider that its revenues do not permit of full payment it shall meet claims *pro rata*. Only the 127 municipalities which were under the Act before 1916 had any claim to the reserves accumulated from surplus income before that year. It was calculated that the Commission was in a position to indemnify the farmers of these 127 municipalities for their losses at the rate of about \$ 2.15 an acre; and those in the remaining thirteen municipalities, who had no claim on the reserves, at that of about \$ 1.30 an acre. Indemnification at these rates could not go far to compensate for the actual loss, in view especially of the fact that the destruction of a large part of the crop would enormously raise the price of seed.

b) Defects of the Scheme.

1) As regards the causes of the breakdown the first defect in the municipal hail insurance scheme brought to light by the breakdown of 1916 was that it had been based on an *inadequate estimate of risks*.

The rate of premium allowed for an average annual loss of 4 per cent. of the total crop. The loss in 1913 was 3 per cent., in 1914 it was $1\frac{3}{4}$ per cent, in 1915 it was 2 per cent. : the average annual loss for these three years was therefore $2\frac{1}{4}$ per cent. But in 1916 the loss was 10 per cent. and thus for the four years the annual average was 5 per cent. or 1 per cent. in excess of the estimate. Hence the failure of the scheme. It is stated that an absolute annual average should be calculated on a period of from fifty to seventy-five years, and that no period of less than twenty-five years can give dependable data.

2) The scheme was therefore speculative. It was so in a second respect because while it competed with firms affording absolute insurance, the measure of insurance it actually gave was *hypothetical*, being limited by the *pro rata* clause. It is clear however that the commissioners advertised their benefits as equivalent or superior to those afforded by the private companies, and that the insured farmers considered that their crops were unservedly insured against hail at the rate of \$ 5 an acre. Further the public character of the scheme seems to have given some of these farmers an idea that their compensation at this rate was guaranteed by the government. Thus a mass meeting held at Venn after the breakdown of the scheme

resolved "that the provincial government be requested to loan the Commission enough money to pay all claims in full".

§ 4. THE PROPOSED AMENDEMENT OF THE SCHEME.

A very general desire was shown by Saskatchewan farmers for the continuance of the Municipal Hail Insurance Scheme in an amended form.

It had been abundantly proved that insurance of this nature, since it was not profit-making but co-operative, and since it could be administered by the municipal organization, was less costly than the insurance afforded by private firms if it could but be made equally secure. But under the existing scheme farmers could not have complete protection unless they insured with a private company the risk left uncovered by the Commission.

Representatives of the rural municipalities under the Municipal Hail Insurance Act held a convention to consider the amendment of the scheme. At this meeting 39 municipalities did not vote or were not represented, but 78 voted in favour, and only 22 against, the full payment of all the claims of 1916. Proposals for amending the scheme were submitted to the convention and all of them provided for a) such full payment, b) the rendering absolute of insurance as afforded by the scheme.

Subsequently the convention appointed a committee consisting of the three Commissioners, the secretary of the Grain Growers' Association and five representative of the municipalities; and these, at meetings held in Regina from 10 to 27 November 1916, considered the proposals submitted to the convention and other suggestions for amending the scheme. Their report was presented to the reeves and representatives of rural municipalities under the Act and to the provincial government on 27 November.

a) Provision for Meeting Losses of 1916 in Full.

The committee offered two alternative suggestions for the meeting of the losses of 1916 in full.

1) They proposed that the ratepayers should be consulted as to whether they would agree to a special levy of 2 cents an acre during 1917 only, the amount accruing from such levy to be applied in part payment of the losses of 1916.

2) They proposed that the rural municipalities under the Act should have an opportunity of voting as to whether they would accept responsibility for the 1916 deficit, on condition that if not less than eighty of them agreed to meet their proportion of such deficit, such eighty would be required to make provision, by sinking fund, debenture issue or otherwise or through the commission, to meet for ten years an annual call for not more than \$3,000 from each municipality.

b) *Provision for Making Insurance Absolute.*

1) *Suggested Plans.* — The committee pointed out in their report that insurance could be made absolute by three methods: by the possession of a surplus of other assets equal to the insurance at risk; by a mutual company in which each of the insured would agree to pay the levies in full in any year; or by an unknown compulsory tax upon the land.

The first of these expedients was out of the question because the 1916 losses would leave over neither surplus nor current revenue, and the assets providing for the future were limited. The second method was only applicable to a scheme under which individuals voluntarily applied for insurance.

The third method if applied in its simplest form would involve the levying on all assessable lands, at the end of any year in which revenue had been inadequate to paying indemnities at the agreed rate, of a tax sufficient to cover the deficit. Such additional assessment would in 1916 have been 16 cents an acre if this method of indemnifying at the rate of \$5 an acre had been adopted. The full cost of insurance in that year would therefore have been 20 cents an acre.

The committee did not deem it wise or just to burden the land with liability to such a tax. Even so important a matter as insurance against hail did not, in their opinion, justify this placing on the land, which already contributed largely to public objects, of a burden which could not be estimated beforehand and might be very onerous.

Under the existing system holders of land in municipalities under the Act are in the position of members of a limited mutual company in which the majority, who are grain growers, compel not only themselves but also the minority, who are not grain growers, to pay a fixed charge upon their lands in order to protect only the grain growers. Proposals were therefore made which sought to limit liability to an additional tax to grain growers.

The details of one of these plans may be given. It aimed at ensuring that those actually enjoying protection should have full mutual responsibility for the insurance; and that a sufficient accumulated surplus should be procured to give ample protection in case of a year or years of extraordinary loss. It proposed therefore that neither the 4 cent per acre assessment rate nor the \$5 maximum indemnity should be altered; but that an extra and variable rate beginning at 12 cents an acre should be levied on all crops at risk, which rate should be lowered only when a surplus equal to 10 per cent. of the risk carried had been accumulated. Any farmer was to be allowed to withdraw his crop acreage from this assessment by foregoing all claim upon the protection of the Commission. No municipality was to be permitted to withdraw from the scheme while it was indebted to the Commission, or in any circumstances without two years' notice. The Commission was to have power to levy on the insured crop acreage an emergency rate, not exceeding 20 cents an acre in any one year, with which to meet

any deficit which might occur. Should this be insufficient a *pro rata* distribution of available funds was to be made among claimants, and any remaining deficit paid out of the possible surplus in the succeeding year, or if this should fail by means of the levy of another and similar 20 cent rate.

This and kindred plans were however rejected by the committee on the grounds of impracticability. "A great deal has been said and written", they state in their report, "about making an assessment upon the assessed acreage or upon the 'excess seeded acreage'. We have fully discussed the advisability of making an assessment of this kind and our opinion is that such assessment would not be practicable at the present time. In the course of a few years it might be possible to provide the administrative municipal machinery necessary to secure the accurate information upon which such an assessment must be based, and which would have to be secured yearly prior to 15 June from each individual ratepayer. To make such an assessment in 1917 would be practically impossible without a heavy expense being incurred in each municipality. The 'excess seeded acreage' assessment is a more or less complicated form of assessment upon the seeded acreage basis".

2. *Plan adopted by the Committee.* — The proposal of the committee was that "the revenue of the commission be raised by a flat rate of 6 cents per acre upon all assessable lands in the municipalities except such as are withdrawn and that the *pro rata* clause be retained".

The adoption of the committee's proposal by the legislature will therefore leave the insurance still hypothetical, in theory if not in practice. The committee in substance declined the responsibility of making a proposal for guaranteed absolute protection. "There is no doubt", runs their report, "that reliable data to place hail insurance rates upon cannot be secured; hail insurance has not been in general operation long enough to provide such information, we can only use such figures as are available and when we recommend an increase of 50 per cent. over the existing rate, and when we consider that if such a rate had been in operation from the inception of the scheme all the losses including 1916 could have been paid in full, we believe that we are recommending a rate that will not be oppressive, that will not depart from the present method of assessment, that will give full protection in ordinary years and a fair protection in disastrous years, a rate that the ratepayer will know is the maximum amount that can be charged upon him, and a rate that will place the present system upon a safer and sounder financial basis than it has been on heretofore".

The committee further proposed that the Commission should be disabled from reducing the fixed rate of premiums "until a surplus has been accumulated which together with the current rate would equal 12 per cent. of the risk carried".

c) *Further Amendments Proposed.*

As regards lands which may annually be withdrawn from insurance, the committee proposed that the second and third categories of these should include patented or unpatented quarter sections, as already described,

in which less than 40 acres were under cultivation, instead of 25 acres as at present. They proposed also to add to these categories two others — namely holdings of not more than 640 acres of land of any owner or occupant, of which one fourth or more were under cultivation ; and holdings of like extent of which one half or more were under cultivation — and proposed further that land in these two additional categories might be withdrawn for three years.

They proposed to render it necessary to give notice of damage incurred by a crop to the secretary of the Commission within three days of the fall of hail, instead of within five days as at present.

They proposed that the Act should be administered by a board of nine directors who should be elected by the annual meeting of the reeves of the municipalities under the Act, nine to be elected by the first meeting and thereafter three each year.

Finally they proposed that the government should be asked to provide that all rural municipalities which did not submit a repealing by-law, upon a petition signed by fifty resident ratepayers, and did not approve such by-law before a date in 1917 yet to be fixed, should automatically remain under the amended Act.

In presenting their report to the municipalities the committee stated that they intended to meet again before the amending legislation was enacted, and expressed themselves ready to receive suggestions made after the report had been considered in the municipal councils or the annual ratepayers' meetings.

Part III: Credit

RUMANIA.

AGRICULTURAL CREDIT IN RUMANIA.

OFFICIAL SOURCE :

ANURUL STATISTIC AL ROMANIEI (*Statistical Yearbook of Rumania*). — Bucharest, 1912.

OTHER SOURCES :

SERBAN (Dr. M.): Rumäniens Agrarverhältnisse (*Agrarian Relations in Rumania*). — Berlin, 1914.

KEILHAUER (A. V.): Die Entwicklung der ländlichen Kreditinstitute in Rumänien (*The Development of Rural Credit Institutions in Rumania*). — Fribourg, 1912.

CREANCA (Dr. G. D.): Grundbesitzverteilung und Bauernfrage in Rumanien (*The Distribution of Landed Property and Agrarian Questions in Rumania*). — Leipzig, 1907, 1909.

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§ I. AGRICULTURAL CREDIT.

For an examination of agricultural credit in Rumania some economic data are necessary as to the agricultural class ; for in this country more than elsewhere there has been a division of labour among the different institutions giving agricultural credit, and this division is based on the differences between the agricultural classes.

Until 1862 the feudal system obtained in Rumania. All the land belonged to a limited class of feudatories, who were called boyards and numbered about 5000, and it was cultivated by 470,000 families belonging to the class of land serfs. The class of small proprietors was represented only by the 100,000 families of the Mosneni in Vallachia and the Rasesi in Moldavia.

Side by side with individual feudatories the State and the churches and monasteries held vast territories.

In 1862 the feudal system was abolished. The law of 15 August 1864 ordered that part of the property of the feudatories should be distributed among the cultivators. Later in 1866, 1869, 1876, 1881 and 1889 the distribution of the lands belonging to the State and the churches was ordered ; and in 1908 a rural bank was formed with the object of granting credit to the farmers in order that they might buy land.

Nevertheless the distribution of landed property in Rumania is far from satisfactory, as is seen from the following table :

62,832	farmers	have	less	than	½-	hectare (1)	that	is	26,426	hectares	or	0.34	%
81,039	"	"	"	"	½-1	"	"	"	72,757	"	"	0.93	%
147,900	"	"	"	"	1-2	"	"	"	237,029	"	"	3.01	%
131,630	"	"	"	"	2-3	"	"	"	337,000	"	"	4.30	%
172,446	"	"	"	"	3-4	"	"	"	631,064	"	"	8.08	%
148,717	"	"	"	"	4-5	"	"	"	711,033	"	"	9.08	%
<hr/>													
744,564	"	"	"	"	5	"	"	"	2,016,209	"	"	25.74	%
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176,375	"	"	"	"	5-10	"	"	"	1,137,136	"	"	14.55	%
36,318	"	"	"	"	10-50	"	"	"	695,953	"	"	2.13	%
2,405	"	"	"	"	50-100	"	"	"	166,847	"	"	8.89	%
38,723	"	"	"	"	10-100	"	"	"	862,800	"	"	11.02	%
4,171	"	"	"	more	than	100	"	"	3,810,351	"	"	48.69	%

Side by side with this class of farmer-proprietors there is one of landless agriculturists which comprises from 250,000 to 300,000 families.

The table we have given shows that there are two classes of landed proprietors in Rumania :

1) Farmers owning a small property of less than 10 hectares. This class is represented by about 920,939 families who own altogether 3,153,675 hectares or 40.29 per cent. of the cultivated land.

2) The class of large proprietors, owning more than 100 hectares, is represented by 4,171 families owning altogether 3,810,351 hectares or 48.69 per cent. of the cultivated land.

Besides these classes there are that of the landless agriculturists, represented by from 250,000 to 300,000 families ; and that of owners of medium-sized properties, of from ten to a hundred hectares, which is represented by only 38,723 families who own 862,800 hectares or 11 per cent. of the cultivated land.

The work attached to credit transactions with large and with small proprietors has been divided among the various institutions of agricultural credit. Those dealing with the large proprietors are :

- 1) *Creditul foncier rural*,
- 2) *Banca agricola*.

Those dealing with the small proprietors are :

- 3) *Creditul agricol si viticol*,
- 4) *Bancile populare*,
- 5) *Casa rurala*.

We will deal with these institutions later.

(1) 1 hectare = 2.47 acres.

§ 2. RURAL LAND CREDIT (CREDITUL FONCIER RURAL).

The first credit institution in Rumania to do business in mortgage credit was the Moldavian Bank formed in 1856. This was a stock company, formed with foreign capital, which in addition to its other banking business granted short or long-term mortgage credit to large proprietors. The long term mortgages were redeemable in seventeen years, the mortgagers being obliged to pay ten per cent. as interest and amortization quota.

Towards 1860 this bank ceased to deal in credit and from that date its only transaction within that sphere has been the liquidation of business then in course.

In 1872 the government brought before the chamber a scheme for the formation of a mortgage bank. According to this scheme the bank would have been a stock company and would have enjoyed the monopoly of granting mortgage credit and issuing mortgage titles on the basis of the credit granted. It would have been authorized to grant to landowners not only mortgage credit but also short-term credit for working funds, and to make advances to the State and the communes.

The scheme encountered in the chamber the lively opposition of the large proprietors who criticized it vehemently under the three following heads;

1) They proposed that instead of a stock-company there should be a co-operative society of large proprietors based on the principle of collective liability.

2) They proposed that there should not be a single institution enjoying a monopoly of the business of mortgage credit and the issue of mortgage titles, but that the law should prescribe the conditions on which such business should normally be done, so that every society of landowners would have to fulfil these conditions before it would be authorized to grant credit or issue mortgage titles.

3) Finally they proposed that the task of granting mortgage credit on rural and on urban lands should be divided among the institutions.

These proposals were all passed by a majority in the chamber and were reproduced in the law of 5-17 April 1873.

Under this law sixty large proprietors having property worth at least three million francs (1) were authorized to form a mortgage bank, if they would accept the clause imposing collective liability. The bank was to have the form of a co-operative society which could have no members other than landowners. The entrance of these into the society was to be optional; but all landowners receiving credit were to be considered as members *ipso facto* and to be collectively responsible for all the bank's engagements to the extent of the value of their mortgaged lands. The law prescribes the division of functions to obtain between banks granting mortgage credit on

(1) 1 franc = 9 $\frac{3}{8}$ d at par.

cultivated land and those granting it to proprietors of urban land. It makes the maximum rate of interest 7 per cent.

On the basis of this law there have hitherto been founded: a mortgage bank for granting credit to proprietors of rural lands, and two mortgage banks — at Bucharest and Jassy — for granting it to owners of urban land. We will here deal only with the first of these banks which was founded 1-13 June 1873 at Bucharest and is called the *Prima Societate de Creditul Funciar Rumun* (First Society of Rumanian Land Credit).

The following are the chief characteristics of this bank :

1) It has no capital in shares, that is its members pay no admission fee. A due of 2 per cent. is however levied on the credit granted, and thus is formed a guarantee fund which remains in the bank until the debt is extinguished. When it has been extinguished the mortgager receives the whole deducted sum without interest. Side by side with this guarantee fund there is a reserve fund, formed of : a) $\frac{1}{4}$ per cent. on all credit granted ; b) 90 per cent. of net profits. The reserve fund is the bank's property and is restored to the mortgagers only after the extinction of debts. The deduction of $\frac{1}{4}$ and 90 per cent. is interrupted as soon as the reserve fund amounts to 5 per cent. of the amount of existing debts.

2) The bank grants credit only to owners of rural land. The grants are for long and short terms. Long-term credit (ten to sixty years) is secured by a first mortgage of rural lands and may not be for more than 50 per cent. of the value of the mortgaged land. The debt is extinguished by annual amortization. Short-term credit (three to ten years) is also guaranteed by a first mortgage on rural lands : the debt is extinguished by annual amortization or it is repaid in a single sum. Mortgagers used in the bank's first years to pay interest at the rate of 7 per cent. but this rate is now 5 per cent.

3) The mortgager receives the amount of his advance in mortgage titles at par. He must himself place them on the market for securities. When he pays the amortization quota of his debt he may do so in cash or in mortgage titles at par.

The mortgage titles are payable to bearer in sixty years, and all State banks accept them as security. Until 1881 they produced interest at the rate of 7 per cent. The rate was in that year reduced to 5 per cent. and titles previously issued were then converted. Since 1898 only mortgage titles at 4 per cent. have been issued. Those at 5 per cent. have not however been converted so that both are in circulation.

4) Until 1882 the bank was authorized to grant credit secured by mortgage titles, but business of this nature has since been forbidden and suspended.

5) The administrative council has eight members elected by the general meeting. Side by side with it there are the managers, namely one manager and two vice-managers, all nominated by the administrative council. The right of inspection belongs to a government commissioner nominated by the Minister of Finances.

6) A deduction of 90 per cent. is made from net profits in order to

form a reserve fund ; the remaining 10 per cent. is divided among the members in proportion to their amortization payments.

The business of 1914 gave the following data :

Guarantee fund	10,600,900 francs
Reserve "	30,409,826
Credit granted	467,613,834
Mortgage titles in circulation . . .	467,585,964
namely { at 5 per cent . . .	327,385,112.50
" 4 " " . . .	140,200,851.50

Altogether 2,000 properties were mortgaged.

§ 3. THE AGRICULTURAL BANK (BANCA AGRICOLA).

Besides the *Creditul foncier rural*, which gives land credit to large proprietors, there is the bank called the *Banca Agricola* which provides them with working capital. It was founded in 1894 on the basis of the law passed on 28 March of that year. It is legally a stock company. During the parliamentary debate on the law cited, in 1893-1894, the large proprietors proposed the formation of a society based on the principle of the collective liability of all its members, but this proposal was not accepted and the bank retained the form of a stock company, in accordance with the government's scheme.

The bank has its headquarterst at Bucharest ; and has five branches — at Braïla, Jassy, Constanza, Craiova and Galatz —, and twelve agencies, — at Botosani, Buzen, Calafat, Calarasi, Palticeni, Guirgni, Roman, Fecuci Fulcea, Vaseni, Ramnicu-Sarat and Turnu-Magurele.

Its capital in shares is 7,938,125 francs, divided into 24,425 shares of 325 francs each. A capital in shares of 12,212,500 francs was at first anticipated, that is 24,425 shares of 500 francs each. Before however it was completely paid up a reduction of 175 francs a share was made. This capital in shares can, if need be, be brought up to twenty million francs.

The *Banca Agricola* receives, in addition to its own capital, outside capital : a) credit granted by the national bank ; b) deposits of individuals. It may also issue bonds (Kaesabons) secured by the credit it has granted. These bear the number of the credit operation on the security of which they have been issued, and may be in circulation for a month or more. The total sum of bonds in circulation must not exceed 50 per cent. of the paid-up capital.

The business of the *Banca Agricola* is as follows :

1) It grants credit secured by pledged property — cereals, live stock and agricultural implements — and on warrants. The cereals may be pledged before the harvest. The credit granted may not exceed 50 per cent. of the value of the pledges, or — if granted before the harvest — 30 per cent. All pledges must be insured.

- 2) It opens current accounts on the security of values.
- 3) It discounts and rediscounts bills.

Transactions of these three descriptions are for short terms, the loans falling due in from three to nine months. The rate of interest varies with that of the National Bank but may not surpass 3 per cent.

Further the *Banca Agricola* undertakes the following business: it receives payments on behalf on its clients; it buys and sells provisions on commission; on behalf of its clients it undertakes all the business connected with the storage of merchandise etc. By the law of 1906 it is authorized to found general storehouses and to store merchandise, but it has not yet begun business of this sort.

The management of the bank in 1911 furnished the following figures:

Capital in shares	fr.	7,938,125.00
Reserve fund	"	3,366,630.54
Deposits	"	20,684,405.05
Debts on rediscounted bills . . .	"	10,036,976.96
Current liability accounts at the Na- tional Bank	"	11,405,932
Various current liability accounts .	"	8,152,623
Advances on cereals	"	8,082,166.33
" " values	"	10,781,032.10
Current credit accounts	"	18,658,695.43
Credit in bills	"	16,016,601.41
Various assets	"	7,787,542.75

§ 4. THE CREDIT INSTITUTIONS FAVOURING SMALL PROPERTIES. THE "CASA RURALE".

This rural bank was formed in 1908. The special law passed on 4 April 1908 aimed at providing credit for landless agriculturists or those having only a very small property, thus enabling them to buy land or increase their property. The tendency of the law is thus to create small proprietors.

The formation of small properties was from 1862 part of the economic programme of the Rumanian government. In that year the feudal system was abolished. Soon afterwards, in 1864, the law was passed as to the compulsory sale of part of the property of large proprietors. In subsequent years — 1866, 1869, 1876, 1881 and 1889 — the laws were passed as to the distribution of the lands of domains and churches among landless farmers or those owning only a very small property. The distribution of landed property is however still far from being reasonable. The excessive increase of the agricultural population on the one hand and the laws on succession on the other have attenuated the effects of the laws we have enumerated, so that the commission of enquiry nominated after the peasants' revolt of 1907 could state in its report:

- 1) that from 250,000 to 300,000 agricultural families had no property;

2) that 423,401 agricultural families, or 46 per cent. of their whole number, owned less than three hectares, which in view of the fact that extensive agriculture prevails may be taken to be insufficient for the maintenance of a family.

Thus from 673,000 to 723,000 families are constrained to seek work on the estates of the large proprietors.

The first scheme for the formation of a rural bank dates from 1897. The Minister of the Public Domain, P. S. Aurelian, presented to the chamber a scheme for the formation of a rural bank as a credit institution of the State. But the change in the ministry which took place soon afterwards delayed this scheme.

In 1906 the question was again inserted in the agenda. A commission, to which D. Strudza, J. Bratianu and G. D. Creanga belonged, was then nominated and charged to recast Aurelian's scheme. The commission drew up an entirely new scheme which it presented to the chamber in 1908; and having been voted by Parliament and received the royal sanction the law entered into force on 4 April 1908.

✓ The Rural Bank has its offices at Bucharest. Legally it is a stock company. Its capital in shares is of ten million francs divided into 20,000 shares of 500 francs each. Half the shares were subscribed by the State which at once paid up 60 per cent; the other half were subscribed by individual capitalists who must pay up at least 10 per cent. of their subscription. The shares are nominative and can be bought only by Rumanians. The capital in shares may be brought up to the sum of 20,000,000 francs on condition half the shares are acquired by the State. Besides its capital in shares the bank obtains credit from the National Bank and capitalists by its issue of rural bonds.

The following business is undertaken by the bank:

1) The purchase of domanial landed property and private property in order to divide it into parcels and sell it to landless agriculturists or small proprietors, and exceptionally to the communes or the State. Where the purchase of State lands is concerned no legal provision limits the action of the Rural Bank. In the case of private property the law forbids the purchase of estates of less than 200 hectares. It is clearly the aim of the law to preserve medium-sized properties.

The Rural Bank pays the price of the land to the sellers either in cash or in bonds. These bonds bear interest at the rate of 5 per cent. and are amortizable in fifty years. They are issued on the security of the mortgage credit afforded by the bank to agriculturists or the land bought by the rural bank. The total value of the bonds in circulation must not surpass the sum of the mortgage credit granted, plus 80 per cent. of the value of the lands which the bank has bought and which are provisionally in its possession.

2) The lands bought by the bank are sold to agriculturists and exceptionally to the communes and the State. Before the sale those on the plain are divided into five-hectare and those in the mountains into three-hectare parcels. Exceptionally and when there are no purchasers for such lots

they may be divided into larger lots having a maximum area of fifty hectares. In accordance with the size of the purchasing family, and the circumstance that the agriculturist purchaser is or is not already in possession of a small landed property, the number of lots which he may buy is determined, the maximum being five.

The price of each lot is calculated on the basis that it may not exceed by more than 10 per cent. that paid by the bank.

Purchasers are bound to pay in cash a part of the price, namely :

10 to 15 per cent. thereof if they buy	1 parcel,
25 " " " " " "	2 or 3 parcels
30 " " " " " "	4 to 5 "

The remainder of the price is debited to the purchaser by the Rural Bank and secured by a mortgage on the parcels bought. These debts are for long terms, amortizable in 50 years and paying interest at the rate of 5 per cent., plus 2 per cent. for unpunctual debtors.

Purchasers of the parcels become owners thereof but do not enjoy them quite freely. Certain restrictions are imposed by the contract of purchase and sale, for example :

- a) the proprietor may not resell his property nor let it on lease ;
- b) division by inheritance may take place only if the area of the property surpass five hectares, and may in this case only affect the area in excess of five hectares ;
- c) the Rural Bank may inspect the farming of the parcels and does so by means of agricultural experts.

If the land intended to be sold in parcels is six kilometres (1) or more distant from a village, a new village is formed ; and then before the division takes place land is set aside as the site of private dwellings and also of the church, the school, the mayoralty, etc.

We have already said that the Rural Bank may sell land exceptionally to the communes and the State. To the communes the land needed to form communal pastures is sold ; to the State woodland.

In the interval between the purchase of lands and their sale to small farmers the Rural Banks may grant them on lease or cultivate them directly. Leases are given by preference to co-operative letting societies. The bank's direct cultivation and the leases it grants are considered provisional and have force only pending the division into parcels or the execution of works of improvement, the ultimate object of the bank's purchase of lands being always to resell them in parcels.

3) The Rural Bank also intervenes between large and small proprietors in negotiations for the purchase and sale of lands. It is even authorized by law to fix the price of land, either by whole properties or by hectare. This right is incontestably a serious restriction of individual liberty ; but it is considered necessary because the agriculturist is always very anxious to acquire land and therefore might easily consent to pay an exorbitant price for it.

(1) 1 Kilometre = 1093.633 yards.

4) The Rural Bank grants mortgage credit to agriculturists :
a) for the purchase of parcels from itself ; b) for the direct purchase of land from large proprietors ; c) for the conversion of debts incurred by such purchase of lands before the foundation of the bank. Credit for these purposes is secured by mortgages of the land in question. The mortgage is for a long term and the interest is at the rate of 3 per cent. The creditors of the debts mentioned under c) may be paid by the bank either in cash or in bonds, as they please.

As well as the long-term credit, granted as stated, the Rural Bank grants to agriculturists short-term credit, secured by bills or pledged agricultural products, agricultural machines, live stock and values.

5) The Rural Bank is authorized by the law to carry on every kind of banking business: the discount of commercial bills, the purchase and sale of titles, etc. This legal provision is justifiably criticized for it makes possible the diminution of the bank's capital to the detriment of the business cited under numbers 1) to 4). In practice however the Rural Bank does little of this banking business.

Net profits are divided as follows : 70 per cent. to shareholders and 30 per cent. to the reserve fund. The State takes, in its capacity of shareholder, only 6 per cent. on the capital it has paid up, all the balance being assigned to the improvements fund.

The conduct of the Rural Bank has provided the following figures :

From the time it was founded until 31 Decembre 1913 it bought the following properties :

Year	Hectares	Value	
1908	8,308	4,200,940	francs
1909	18,736	9,532,828	"
1910	30,597	16,392,155	"
1911	18,459	13,256,991	"
1912	12,893	12,342,146	"
1913	26,473	20,068,824	"
	<u>115,467</u>	<u>15,793,886</u>	"

Of these 115,467 hectares only 20,171 are wooded and therefore capable of being sold to the State.

The Rural Bank has sold a) to the communes 8,709 hectares for 28,909,600 francs ; and b) to agriculturists as follows :

Year	Number of parcels	Hectares	Francs
1909	124	519	436,430
1910	458	2,183	1,778,288
1911	856	3,751	2,696,774
1912	1,324	5,971	4,695,285
1913	870	3,943	3,537,845
	<u>3,632</u>	<u>16,369</u>	<u>13,144,621</u>

These 3,632 parcels were sold to 3,318 agriculturists, which is to say that 89 per cent. bought only one parcel each.

In addition to its sales the bank has let on lease: 20,856 hectares to fourteen collective farms comprising 3,677 members; and 17,777 hectares to 5,099 agriculturists.

The remainder — namely 32,187 hectares of arable land and 20,171 hectares of woodland — is directly cultivated and its profits realized by the bank.

The Rural Bank has granted 4,128,912 francs on mortgages to agriculturists who have bought their lands directly from large proprietors. At the end of 1913 the short-term credit granted amounted to 5,602,048.65 francs. The value of the credit granted to communes was 28,647,200 francs. Net profits in 1913 were 990,450.69 francs. This sum was distributed as follows:

To the reserve fund	30 per cent.	297,135.00 francs
To the shareholders	30 " "	646,657.80 "
To the improvement funds . .	30 " "	46,657.89 "

According to the balance-sheet of 1913 the reserve fund was 1,179,754 francs.

§ 5. AGRICULTURAL AND VITICULTURAL CREDIT (CREDITUL AGRICOL SI VITICOL).

On 30 May 1881 the law as to departmental agricultural banks was passed in Rumania. The first of these banks was founded in 1882 and gradually there came to be one of them in each department.

Legally they are stock-companies. In the intention of the law all shares were to be subscribed by the agriculturists of the departments, but this was realized only in the agricultural bank of Jassy. The subscription of shares in all other departments was very small and the State was obliged to provide the necessary working capital in the form of loans to the banks. In 1892, the year in which the working of the banks was arrested, the loans granted by the State amounted to seven million francs.

The activity of each bank was limited to the department in which it was situated. The banks were completely independent of each other. They were authorized to grant to agriculturists only short-term credit, for terms of nine months, the security being: a) bills; b) pledged agricultural products or machines and values. The rate of interest was at first 7 per cent. but was raised to 11 per cent., and if dues to be paid on documentary evidence supplied or drawn up be included the actual rate was often from 15 to 20 per cent.

The law prescribed no maximum for loans to agriculturists. Thus at the beginning of each year all or almost all the available capital was engrossed by a restricted number of medium-sized proprietors, and small proprietors derived no benefit from the banks. Their unsatisfactory results decided

the government to decree their suspension by the law of 2 July 1892, and to supersede them by the Agricultural Credit which began business on 1 January 1913.

Instead of the decentralization which had hitherto prevailed a centralization of business was brought about by the law of 1892. An agricultural bank was formed which was situated at Bucharest and had branches in all the departmental centres in which there had previously been an agricultural departmental bank.

This institution of agricultural credit is a State institution depending on the Minister of Finances (art. 9). It has three sections :

- a) Section I. is concerned with mortgage credit.
- b) Section II. is concerned with long-term debts of a particular kind, debts namely incurred for initial installation under the law of 1889.
- c) Section III., formed in 1906, grants long-term credit for the plantation of vineyards.

The capital in shares paid by the State is 25,000,000 francs, namely : 20,000,000 francs to the first, 3,000,000 francs to the second and 2,000,000 francs to the third section. The capital was paid as follows :

1) The first section received the sums granted by the State in the form of a loan to the departmental banks, namely 7,000,000 francs, and it received 13,000,000 francs in State bonds (art. 12).

2) The second section was granted a current account at the National Bank and the State issued bonds up to the value of the credit granted.

3) The third section received for four years 500,000 francs a year — namely a total sum of 2,000,000 francs — deducted from the net profits of the first section.

Besides the capital in shares belonging to the State the Agricultural Credit uses capital emanating from other sources. The first section is authorized : a) to accept deposits ; b) to borrow from the National Bank proportionately to the credit granted to its clients. The third section is also authorized to issue bonds secured by the credit granted. These bonds of 100-200 francs and 500 francs are at 4 ½ per cent, redeemable in twenty years, and the total value of those issued must not surpass 20,000,000 francs.

Section I. grants short-term credit, for from three to nine months, secured by pledged agricultural products and machines and live stock. The rate of interest is 11 per cent. for costs of administration, plus 2 per cent. for unpunctual debtors. The total credit granted to a borrower must not be more than 1000 francs. Section I. is, as has already been said, authorized to accept deposits and also to receive payments on behalf of the National and the Agricultural Bank.

From 1903 to 1906 Section I. had the responsibility of acting as a central bank for the agricultural co-operative credit societies ; and as such was authorized to discount and rediscount the societies' bills and make loans to them on current account. In 1906 a truly independent central bank for the co-operative societies was formed, and thus the Agricultural Credit no longer undertook business of this description.

Of the net profits 90 per cent. belong to the State and 10 per cent. are deducted to be paid into the reserve fund. The deductions for the reserve fund will cease as soon as its amount has reached 5,000,000 francs.

Section II. grants both long and short-term credit for from three to ten years. This credit is granted for initial installation. According to the law of 1889 (art. 3) the Ministry of the Public Domains is authorized to sell the State's landed property in 5-hectare lots. The purchasers of these lots are obliged to establish themselves on them within three years. Section II. facilitates settlement of this description by granting to the settlers loans enabling them to build dwellings and buy live stock and agricultural implements. No more than 600 francs may thus be lent to a single borrower. The rate of interest is 5 per cent.

Section III. was formed on 16 January 1906. On 27 May of that year it was separated from the Agricultural Credit and remained separate until 30 March 1908 when it once more became Section III. thereof.

It makes long-term loans, for twenty years, for the plantation of vines. All its loans are guaranteed by the State on the security of a mortgage on the planted vines. The sum of the loan may not exceed two thirds of the value of the vineyard. The credit granted is supplied to the borrower on account as gradually the planting, which is inspected by an employee of the lending institution, is effected.

The rate of interest is 5 ½ per cent., plus 1 per cent. for unpunctual borrowers (art. 7). The loans are amortizable in fifteen years but the first repayment does not take place until after five years, at which date the vines are beginning to be productive.

From 1882 to 1892 the departmental banks granted credit for 188,194,892 francs. When they ceased to work in 1892 the total credit they had granted was for 19,988,041.35 francs, and this credit was transferred to the Agricultural Credit.

From 1903 to 31 December 1911 Section I. of the Agricultural Credit granted credit for 504,594,240 francs. At the end of 1911 the amount of the credit was 16,984,046.05 francs.

At the same time the following deposits were received :

From 1882 to 1892	5,133,534	francs
" 1893 " 1911	33,111,507.26	"

On 1 January 1912 deposits amounted to 3,374,123.84 francs.

On 31 December 1911 the reserve fund amounted to 2,608,693.12 francs.

From 1893 to 31 December 1911 the net profits paid to the State amounted to 27,478,238.08 francs, that is a sum 4,478,238.08 francs in excess of the amount of the capital advanced by the State.

Section II. in only four years (1894, 1895, 1897 and 1898) granted credit to the amount of 862,060 francs.

Section III. began business in 1907 and granted credit for the following sums : 943,100 francs in 1907 ; 1,297,600 francs in 1908 ; 1,045,600 francs in 1909 ; 846,800 francs in 1910 ; 3,271,000 francs from 1911 to 1914 — that is a total sum of 7,404,100 francs from 1907 to 1914.

One fifth of this credit was granted in the district of Prahova and large sums in the districts of Buzan, Doej and Valcea. The other districts participated only to a small extent.

Bonds in circulation amounted on 31 March 1915 to 5,404,100 francs.

The repayment of loans begins, as we have said, only after five years ; that is to say payments were made in 1912 for loans of 1907, in 1913 for loans of 1907 and 1908, and in 1914 for loans of 1907, 1908 and 1909. This delay of five years before first repayments are made brings about that books are closed showing a loss which is only apparent. For the year 1915 it was 767,346.49 francs.

§ 6. THE RURAL CO-OPERATIVE CREDIT SOCIETIES.

The first rural co-operative credit society was formed at Urziceni in the department of Jaloniza in January 1891. In subsequent years until 1898 the co-operative movement did not make much progress. Agriculturists had no confidence in the societies. The large farmers and the usurers were opposed to them seeing in them formidable competitors. The State was completely indifferent. For all these reasons the co-operative movement was slow in these first years. Only twenty-five rural co-operative credit societies were founded from 1891 to 1898.

In 1898 Spira Haret was nominated Minister of Religion and he devoted himself to the development of the co-operative movement. He charged some masters of primary schools to teach the peasants the usefulness of co-operative societies and the need there was for them. From this year the co-operative movement developed, and when the law on co-operative societies was passed in 1903 there were already more than 700 of them. All were of the Schultze-Delitsch type — that is to say they were limited liability societies.

The law of 1903 caused the co-operative movement to enter into a new phase. The proposed law as presented to parliament contained the following principles : 1) the limited liability of members ; 2) the State's minute inspection of the management of the societies. These principles were however attenuated by parliament, and the law which has been in force since 28 March 1903 contains the following :

1) All co-operative societies, whether credit or other, are legal corporations. They may be formed on the basis of either unlimited or limited liability. Those of the first form enjoy however a preference under the law which declares them exempt from taxes. Co-operative societies founded on the principle of limited liability are obliged to subscribe a capital in shares of at least a thousand francs ; those founded on the principle of unlimited liability can be formed without any capital in shares.

2) All the co-operative societies are subject to the inspection of the Agricultural Credit, that is to say of the Central Bank which was a section of the Agricultural Credit and is obliged to hold an inspection at least once a year.

3) A Central Bank was formed for the co-operative societies, as a section of the Agricultural Credit, and gives credit to the co-operative credit societies. Since 1906 the Central Bank has been separated from the Agricultural Credit, and works as an autonomous institution. The law lays down conditions which the co-operative societies must fulfil in order to obtain credit from the Central Bank. These are as follows : 1) a society must accept as members only the peasants of the village in which it is situated ; 2) the rate of interest it receives will be fixed by the central bank ; 3) 10 per cent. of the net profits will be paid into a reserve fund. All these conditions show a desire to favour co-operative societies having unlimited liability.

At first the Central Bank was, as we have said, attached to the Agricultural Credit : 1) because the latter had a very large capital at its disposal ; 2) because it had experience in the credit business transacted with peasants.

Later, in 1906, when the Central Bank was separated from the Agricultural Credit, the special law prescribed that its working capital should be supplied by the Agricultural Credit.

Of recent years there has been a movement towards forming district federations. Four of these have been formed : one at Dumbraveni which unites ten co-operative societies and has a capital in shares of 27,000 francs, one at Fg. Bujor which comprises eighteen co-operative societies and has a capital in shares of 45,000 francs ; one at Topoloveni which has eleven co-operative societies and a capital in shares of 23,200 francs ; and one at Fg. Giacenea which has ten societies and a capital of 50,000 francs.

The co-operative credit societies grant credit to their members, and also to outsiders who receive about one third of their loans. The loans are for long and for short terms: namely for from nine months to three years for the purchase of provisions, forage and seeds ; and for from three to ten years for that of live stock and agricultural implements and for the renting and purchase of land.

The business of the co-operative societies furnishes the following figures, In 1902 there were 2,862 rural co-operative credit societies, having 563,270 members ; 99,067.74 francs of paid-up capital ; 7,151,799 francs in reserve funds ; 16,503,381 francs in deposits : and debts to the Central Bank of 11,447,529 francs. They had granted 138,652,562 francs in credit. This credit was distributed as follows : 1) For provisions and forage 17.37 per cent ; for live stock and agricultural implements 32.34 per cent. ; for the purchase and renting of land 20.78 per cent. ; various 16.74 per cent. 2) Personal credit amounted to 37.75 per cent. and credit on chattels to 62.25 per cent (27.33 per cent. on bills and 34.92 per cent. on pledges). 3) The following shows the amounts of the credit granted ; 6.46 per cent. of the grants were of less than 50 francs; 18.62 per cent. were from 50 to 100 francs; 68.40 per cent. from 100. to 1000 francs; 6.52 per cent. more than 1000 francs.

Part IV: Agricultural Economy in General

UNITED STATES.

LAND TENURE AND THE ORGANIZATION OF AGRICULTURE ON INDIAN RESERVATIONS IN THE UNITED STATES

prepared under the direction of CATO SELLS,
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§ I. LAND TENURE.

On June 30, 1916, there were 312,654 Indians in the United States under Federal supervision, occupying 174 reservations. Some of these reservations were granted by Act of Congress, pursuant to treaties or agreements with the various tribes; others were established by Executive Order of the President of the United States; and several were acquired by still different methods, which will be explained hereafter. In the Proclamation of George III, dated October 7, 1763, four principles of government in Indian affairs, in force to the present day, were laid down:

(1) *The recognition of the Indian's right of occupancy*: * * * "And whereas it is just and reasonable, and essential to our interest, and the security of our Colonies, that the several nations or tribes of Indians, with whom we are connected, and who live under our protection, should not be molested or disturbed in the possession of such parts of our dominions and territories, as, not having been ceded to, or purchased by us, are reserved to them, or any of them, as their hunting grounds.

(2) *The right to expel white intruders on Indian lands*: * * * "All the lands and territories not included within the limits of our said three new Governments or within the limits of the territory granted to the Hudson's Bay Company; as also all the lands and territories lying to the westward of the sources of the rivers which fall into the sea from the West and Northwest as aforesaid; and we do hereby strictly forbid * * * all * * * subjects from making * * * settlements * * * or taking possession of any of the lands above reserved * * *. And we do further strictly enjoin and require all persons whatever, who have wilfully or inadvertently seated themselves upon any lands within the counties above described, or upon any other lands, which have not been ceded to, or purchased

by us, are still reserved to the said Indians as aforesaid, forthwith to remove themselves from such settlements.

(3) *The right to purchase Indian lands is vested solely in the government*: * * * "We do, with the advice of our Privy Council, strictly enjoin and require that no private person do presume to make any purchase from the said Indians of any lands reserved to the said Indians * * * if at any time any of the said Indians should be inclined to dispose of the said lands, the same shall be purchased only for us, in our name.

(4) *The right to regulate trade and license traders*: * * * "Every person who may incline to trade with the said Indians, do take out a license for carrying on such trade, from the Governor or Commander-in-chief of any of our colonies respectively * * * and also give security to observe such regulations as we shall at any time think fit * * * to direct and appoint for the benefit of the said trade".

The civilized nations of Europe which had acquired territory on this continent, asserted in themselves and recognized in others the exclusive right of the discoverer to appropriate the lands occupied by the Indians. By the Treaty of 1783, the United States acquired all the rights to the soil which had previously been in Great Britain; by the Treaty of 1803, with France (the Louisiana purchase) it agreed to execute and respect all treaties made or agreed upon between Spain and the several tribes of Indians residing within the territory ceded. The Supreme Court of the United States, in an early decision, held that the Government had a clear title to all the lands within the areas referred to above, subject only to the Indian right of occupancy; that the Indians had the unquestioned right to the lands they occupied until that right was voluntarily transferred by them to the Government; that they occupied lands to which the United States held title, independent of their will which must take effect in respect to possession when their right of occupancy ceased; and that the claim of the Government extends to the complete ultimate title, charged with the Indian right of occupancy and possession, and to the exclusive power to acquire that right.

During the colonial period, charters and grants were made by the Government, of land for the occupancy of Indians, known as their hunting grounds. Their rights to its exclusive enjoyment in their own way and for their own purposes were always recognized by the colonists until abandoned or ceded by them, their right of occupancy being respected by the political power of the colony and upheld by the courts until extinguished.

Article 3, of the Act of July 13, 1787, entitled "An ordinance for the government of the territory of the United States northwest of the river Ohio", provides, in part, as follows:

"The utmost good faith shall always be observed toward the Indians; their land and property shall never be taken from them without their consent; and in their property, rights and liberty they shall never be invaded or disturbed, unless in just and lawful wars authorized by Congress; but laws founded in justice and humanity shall from time to time

be made for preventing wrongs being done to them and for preserving peace and friendship with them ”.

Originally, the relations of the Government with the Indians were determined by treaties made with their tribal authorities. Although the Government claimed complete sovereignty over the territory and inhabitants within its limits, and while treaties, in the true legal sense of the term, can only be entered into between independent sovereignties, yet the colonies, and also the mother country, had treated with the Indians as “ nations ”, their chiefs, or “ sachems ”, often being designated kings. This notion was retained by the founders of the Government and thus became its established policy.

The early treaties generally defined the boundary line between the Indian country and that of the United States, which at first extended from the lake on the north to Florida on the south. The United States claimed no control over its citizens who ventured to pass this line. Gradually trading and military posts were established and the land about them secured from the Indians ; then roadways between these stations were obtained ; until finally the Indians were living upon defined tracts. The continued pressure of immigration and the consequent demand for land resulted in the Indians exchanging their more eastern tracts for reservations, set apart for them by the Government in the western part of the country. The establishment of such reservations was the natural result of the cession of their lands by the Indians to the United States, and was necessary in order to provide them with homes and with land for cultivation ; to avoid disputes in regard to boundaries ; and to bring the Indians more easily under the control of the Government by confining them within given areas. This policy involved a very important and radical change in the customs and habits of the Indians and was the first step by them toward agricultural pursuits as their principal means of livelihood, the organization and development of which form the subject of the second part of this article.

The making of treaties with the Indians was terminated by the Act of March 3, 1871, as follows :

“ Hereafter no Indian tribe within the territory of the States shall be accepted or recognized as an independent nation, tribe, or power, with whom the United States may contract by treaty. ”

The effect of this Act was to bring under the immediate control of Congress the relations of the Government with the Indians, and to reduce to simple agreements, subject to ratification by Congress, what had previously been accomplished by formal and solemn treaties, as with a foreign power. However, this procedure accomplishes practically the same results in a different manner more consonant with the real sovereignty of the United States and the progress of civilization.

After the passage of this law, reservations were created either by Act of Congress (generally in ratification of an agreement with the Indians) or by Executive Order of the President of the United States, either with or without the specific authority of Congress, such reservations being

sometimes authorized by Act of Congress and their limits subsequently defined by Executive Order; others were first established by Executive Order and later confirmed by Act of Congress. This, however, is not necessary, as the President may, at his discretion, establish Indian reservations, on public lands not otherwise occupied, without the specific prior authority of Congress, or its subsequent ratification.

The right of the Indians to their reservation is ordinarily subject to certain restrictions, as set forth by decision of the United States Supreme Court, a portion of which is quoted below:

"The right of the Indians to the reservations ordinarily occupied by them is that of occupancy alone. The fee is in the United States, subject only to this right of occupancy. The Indians have no power of alienation except to the United States. But while the fee to the reservations is in the United States, the right of the Indians to their use and occupancy is as sacred as that of the Government to the fee. They have the right to apply to their own use and benefit the entire products of the reservation, whether the result of their own labour or of natural growth, so they do not commit waste. If the lands in a state of nature are not in a condition for profitable use they may be made so; if desired for the purpose of agriculture they may be cleared of their timber to such an extent as may be reasonable under the circumstances, and the surplus timber taken off by the Indians in such clearing, and not required for use on the premises, may be sold by them. The Indians may cut growing timber for fuel and for necessary use upon the reservation; they may open mines and quarry stone for the sole purpose of obtaining fuel and building material; they may cut hay for the use of their live stock, and may sell any surplus not needed for that purpose. In short, what a tenant for life may do upon the lands of a remainder-man the Indians may do upon their reservation, but no more."

On the other hand, it is obligatory upon the Government to prevent any intrusion, trespass, or settlement on the lands of any Indian tribe, unless such tribe has first given its consent thereto, either by treaty or agreement. In a few cases reservations have been patented to certain tribes by the Government, such as the Cherokees, Choctaws, and Creeks. The construction given to such patents by the courts is that they are not titles in fee simple, for they convey no power of alienation except to the United States; neither are they the same as the ordinary title of occupancy; they are rather a "base, qualified, or determinable fee, with a possibility of reversion to the United States only", and the Indians may cut, sell, or dispose of the timber, and permit mining and grazing within the limits of their respective tracts by their own citizens.

In several cases the Indians have purchased the lands comprising their reservations, the title thereto being held in trust for their benefit by the Government tribal council, or other parties.

At first the land was held in common for the benefit of all the Indians, each head of a family being allowed to cultivate and use a tract assigned to or selected by him, a certificate of occupancy sometimes being issued

as evidence of his right thereto. This policy was continued until the passage by Congress of the General Allotment Act on February 8, 1887, several sections of which are quoted below :

(1) (As amended by the Acts of February 28, 1891 and June 25, 1910). " That in all cases where any tribe or band of Indians has been or shall hereafter be located upon any reservation created for their use by treaty stipulation, Act of Congress, or executive order, the President shall be authorized to cause the same or any part thereof to be surveyed or resurveyed whenever in his opinion such reservation or any part thereof may be advantageously utilized for agricultural or grazing purposes by such Indians, and to cause allotment to each Indian located thereon to be made in such areas as in his opinion may be for their best interest, not to exceed eighty acres of agricultural or one hundred and sixty acres of grazing land to any one Indian. And whenever it shall appear to the President that lands on any Indian reservation, subject to allotment by authority of law, have been or may be brought within any irrigation project, he may cause allotments of such irrigable lands to be made to the Indians entitled thereto in such areas as may be for their best interest, not to exceed, however, forty acres to any one Indian, and such irrigable land shall be held to be equal in quantity to twice the number of acres of non-irrigated agricultural land and four times the number of acres of non-irrigable grazing land : *Provided*, That the remaining area to which any Indian may be entitled under existing law, after he shall have received his proportion of irrigable land on the basis of equalization herein established, may be allotted to him from non-irrigable agricultural or grazing lands : *Provided further*, That where a treaty or Act of Congress setting apart such reservation provides for allotments in severalty in quantity greater or less than that herein authorized, the President shall cause allotments on such reservations to be made in quantity as specified in such treaty or Act, subject, however, to the basis of equalization between irrigable and non-irrigable lands established herein, but in such cases allotments may be made in quantity as specified in this Act, with the consent of the Indians expressed in such manner as the President in his discretion may require.

(5) " That upon the approval of the allotments provided for in this Act by the Secretary of the Interior, he shall cause patents to issue therefor in the name of the allottees, which patents shall be of the legal effect, and declare that the United States does and will hold the land thus allotted, for the period of twenty-five years, in trust for the sole use and benefit of the Indian to whom such allotment shall have been made, or, in the case of his decease, of his heirs according to the laws of the State or Territory where such land is located, and that at the expiration of said period the United States will convey the same by patent to said Indian, or his heirs as aforesaid, in fee, discharged of said trust and free of all charge or incumbrance whatsoever ; *Provided*, That the President of the United States may in any case in his discretion extend the period. And if any conveyance shall be made of the lands set apart and allotted as herein

provided, or any contract made touching the same, before the expiration of the time above mentioned, such conveyance or contract shall be absolutely null and void: *Provided*, That the law of descent and partition in force in the State or Territory where such lands are situate shall apply thereto after patents therefor have been executed and delivered, except as herein otherwise provided; and the laws of the State of Kansas regulating the descent and partition of real estate shall, so far as practicable, apply to all lands in the Indian Territory which may be allotted in severalty under the provisions of this Act: *And provided further*, that at any time after lands have been allotted to all the Indians of any tribe as herein provided, or sooner if in the opinion of the President it shall be for the best interests of said tribe, it shall be lawful for the Secretary of the Interior to negotiate with such Indian tribe for the purchase and release by said tribe, in conformity with the treaty or statute under which such reservation is held, of such portions of its reservation not allotted as such tribe shall, from time to time, consent to sell, on such terms and conditions as shall be considered just and equitable between the United States and said tribe of Indians, which purchase shall not be complete until ratified by Congress, and the form and manner of executing such release shall also be prescribed by Congress.

(6) (As amended by the Act of May 8, 1906). " That at the expiration of the trust period and when the lands have been conveyed to the Indians by patent in fee, as provided in section five of this Act, then each and every allottee shall have the benefit of and be subject to the laws, both civil and criminal, of the State or Territory in which they may reside; and no Territory shall pass or enforce any law denying any such Indian within its jurisdiction the equal protection of the law. And every Indian born within the territorial limits of the United States to whom allotments shall have been made and who has received a patent in fee simple under the provisions of this Act, or under any law or treaty, and every Indian born within the territorial limits of the United States who has voluntarily taken up within said limits his residence, separate and apart from any tribe of Indians therein, and has adopted the habits of civilized life, is hereby declared to be a citizen of the United States, and is entitled to all the rights, privileges, and immunities of such citizens, whether said Indian has been or not, by birth or otherwise, a member of any tribe of Indians within the territorial limits of the United States without in any manner impairing or otherwise affecting the right of any such Indian to tribal or other property: *Provided*, That the Secretary of the Interior may, in his discretion, and he is hereby authorized, whenever he shall be satisfied that any Indian allottee is competent and capable of managing his or her affairs, at any time to cause to be issued to such allottee a patent in fee simple, and thereafter all restrictions as to sale, incumbrance, or taxation of said land shall be removed and said land shall not be liable to the satisfaction of any debt contracted prior to the issuing of such patent: *Provided further*, That until the issuance of fee-simple patents all allottees to whom trust patents shall hereafter be issued shall be

subject to the exclusive jurisdiction of the United States: *And provided further*, That the provisions of this Act shall not extend to any Indians in the Indian Territory.

"That hereafter when an allotment of land is made to any Indian, and any such Indian dies before the expiration of the trust period, such allotment shall be cancelled and the land shall revert to the United States, and the Secretary of the Interior shall ascertain the legal heirs of such Indian, and shall cause to be issued to said heirs and in their names, a patent in fee simple for said land, or he may cause the land to be sold as provided by law and issue a patent therefor to the purchaser or purchasers, and pay the net proceeds to the heirs, or the legal representatives, of such deceased Indian. The action of the Secretary of the Interior in determining the legal heirs of any deceased Indian, as provided herein, shall in all respects be conclusive and final."

The terms of such patents transmitting title to the Indian allottee, first in trust, and then in fee simple, as provided by the Act, are as follows.

Trust.

"Whereas, a schedule of allotments approved by the Secretary of the Interior has been deposited in the General Land Office, whereby it appears that John Smith, a Flathead Indian, has been allotted the following described land: Northwest quarter of the southeast quarter of Section twenty-seven, township six, north, range thirteen west, Montana principal meridian.

"*Now Know Ye, that the United States of America, in Consideration of the Premises*, has allotted, and by these presents does allot, unto the said Indian the land above described, and hereby declares that it does and will hold the land thus allotted (subject to all statutory provisions and restrictions) for the period of twenty-five years, in trust for the sole use and benefit of the said Indian; and at the expiration of said period, the United States will convey the same by patent to said Indian in fee, discharged of said trust and free from all charge and incumbrance whatsoever; but in the event said Indian dies before the expiration of said trust period the Secretary of the Interior shall ascertain the legal heirs of said Indian and either issue to them in their names a patent in fee for said land or cause said land to be sold for the benefit of said heirs as provided by law; and there is reserved from the lands hereby allotted a right of way thereon for ditches or canals constructed by the authority of the United States.

Fee.

"Whereas, an order of the Secretary of the Interior has been deposited in the General Land Office directing that a fee simple patent issue to the claimant, John Smith, a Flathead Indian, for the Northwest quarter of the southeast quarter of section twenty-seven, township six, north, range thirteen west, Montana principal meridian.

"Now Know Ye, that the United States of America, in consideration of the premises, has given and granted, and by these presents does give and grant unto the said claimant and to the heirs of the said claimant, the land above described, to have and to hold the same together with all the rights, privileges, immunities, and appurtenances of whatsoever nature thereunto belonging, unto the said claimant and to the heirs and assignees of the said claimant, forever; and there is reserved from the lands hereby granted a right of way thereon for ditches or canals constructed by the authority of the United States".

Sections 4 and 5 of the Act of June 25, 1910, provide as follows:

"(4) That any Indian allotment of any Indian held under a trust patent may be leased by the allottee for a period not to exceed five years, subject to and in conformity with such rules and regulations as the Secretary of the Interior may prescribe, and the proceeds of any such lease shall be paid to the allottee or his heirs, or expended for his or their benefit, in the discretion of the Secretary of the Interior.

"(5) That it shall be unlawful for any person to induce any Indian to execute any contract, deed, mortgage, or other instrument purporting to convey any land or any interest therein held by the United States in trust for such Indian, or to offer any such contract, deed, mortgage or other instrument for record in the office of any recorder of deeds. Any person violating this provision shall be deemed guilty of a misdemeanour, and upon conviction shall be punished by a fine not exceeding five hundred dollars for the first offence, and if convicted for a second offence may be punished by a fine not exceeding five hundred dollars or imprisonment, not exceeding one year, or by both such fine and imprisonment, in the discretion of the court: *Provided*, That this section shall not apply to any lease or other contract authorized by laws to be made".

In brief, this Act provides for the allotment of land in severalty to each individual Indian, in the quantity specified, for the different classes; for the issuance to said Indian of a trust patent; as evidence thereof, to run twenty-five years; that at the expiration of this period, unless extended (or sooner, within the discretion of the Secretary of the Interior), a fee patent shall be issued to the allottee, removing said land from Government control; that any conveyance or hypothecation thereof during the trust period is void; and that, upon being given the fee patent, the Indian becomes a citizen of the State in which he lives, and subject to all the laws thereof (previously thereto having been under the exclusive jurisdiction of the United States).

Under Sections 4 and 5 of the Act of June 25, 1910, above quoted, an Indian holding a trust patent may lease his land, with the approval of the Secretary of the Interior, the proceeds thereof being paid to said Indian if competent or expended for his benefit if incompetent. It is also made unlawful to induce any Indian holding a trust patent to execute any contract, deed or mortgage with respect thereto. An Indian holding a trust patent may sell his land or devise it by will, with the approval of the Secretary of the Interior.

According to the latest figures there are 312,654 Indians in the United States under Federal supervision, who inhabit 174 reservations comprising 70,891,091 acres of land. Under the general allotment Act, as amended, 211,172 allotments of land in severalty have been made to individual Indians, aggregating 34,477,970 acres, and trust patents issued therefor as above set forth. Of this number, 72,508 Indians now hold trust patents and 112,357 hold fee patents. Since 1902, sales have been effected of 11,752 individual tracts of allotted Indian land, comprising 1,405,463 acres, for a total of \$22,015,907.

§ 2. THE ORGANIZATION OF AGRICULTURE.

Almost without exception the early explorers found the Indians in what is now the United States, from the border of the Western plains to the Atlantic Ocean, dwelling in settled villages and cultivating the soil. De Soto found all the tribes visited by him from the Florida peninsula to the Western part of Arkansas cultivating maize and other food plants. The early voyagers found the same thing true along the Atlantic Coast from Florida to Massachusetts. Captain John Smith and his Jamestown colony, indeed all the early colonies, depended at first very largely for food supplies upon the products of Indian cultivation. Jacques Cartier, the first European to ascend the St. Lawrence River, found the Indians cultivating the soil. "They have", he says, good and large fields of corn." Champlain and other early French explorers testify to the great reliance of the Iroquois on the cultivation of the soil for food. La Salle observed the Indians cultivating and to a large extent subsisting on maize. Besides maize, beans, squashes, pumpkins, sweet potatoes, and tobacco were cultivated to a considerable extent, especially in what are now the Southern States. Marquette, speaking of the Illinois Indians, says that, in addition to maize, "they also sow beans and melons, which are excellent, especially those with the red seed".

In regard to the tribes further West an early writer states, "From the earliest information we have of the Pueblo Indians they are known to have been tillers of the soil, and though the implements used and their methods of cultivation were both simple and primitive, cotton, corn, wheat (after its introduction), beans and many varieties of fruit were grown in abundance."

The Indians of Arizona and New Mexico had learnt the art of irrigating their fields before the appearance of the white man on the continent. This is shown not only by the statements of the early explorers but also by the still existing remains of their ditches, estimated to have been sufficient for the irrigation of at least 250,000 acres.

There is definite evidence that the Indians used fertilizers although it has been stated that they did not. The Plymouth colonists were told by Indians to add fish to the old grounds. It is also stated that the Iroquois manured their land. Lescarbot says that the Virginia Indians and others

"enrich their fields with shells and fish". The implements they used in cultivating the ground are described by him as "wooden howes and spades made of hard wood". "The Florida Indians dig their ground with an implement of wood fashioned like a broad mattox; they use howes made of the shoulder blades of animals fixed on staves; and a piece of wood three inches broad, bent at one end and fastened to a long handle, suffices them to free the land from weeds and turn it up lightly"

Among the Indians the farm and field work was mostly done by the women, the men being regarded as hunters and warriors. Harriot says (1810):

"The women, with short pickers or parers (because they use them sitting) of a foot long and about five inches in breadth, do only break the upper part of the ground to raise up the weeds, grass and old stubs or corn stalks with their roots."

It was a general custom to burn over the ground before planting in order to free it from weeds and rubbish. In the forest region patches were cleared by girdling the trees, thus causing them to die and afterwards burning them down. While the women were thus occupied, the men engaged in fishing, hunting, or trapping, when not busy on the war path.

The first treaty between the United States and any Indian tribe was made with the Delawares on September 17, 1778, and was concerned primarily with the establishment and preservation of peace between the whites and Indians and the recognition by the latter of the authority of the United States. No grants of money or food supplies to Indians were made therein, but this practice gradually developed in subsequent treaties, many of which also included an agreement on the part of the Indians to remain within a certain restricted locality, this being the germ of the present reservation system. Apparently the first treaty in which the United States specifically agreed to furnish farmers to instruct the Indians in agricultural pursuits was that with the Menominee Indians on February 8, 1831, as follows:

"The above reservation being made to the Menominee Indians, for the purpose of weaning them from their wandering habits by attaching them to comfortable homes, the President of the United States, as a mark of affection for his children of the Menominee tribe, will cause to be employed five farmers of established character for capacity, industry and moral habits, for ten successive years, whose duty it shall be to instruct the Menominee Indians in the cultivation of their farms and to instruct their children in the business and occupation of farming."

The first general appropriation for Indian education was made on March, 3, 1819, when an Act was passed appropriating \$10,000 as follows:

"For the purpose of providing against the further decline and final extinction of the Indian tribes adjoining the frontier settlements of the United States, and for introducing among them the habits and arts of civilization, the President of the United States shall be, and he is hereby, authorized, in every case where he shall judge improvement in the habits

and condition of such Indians practicable, and that the means of instruction can be introduced with their own consent, to employ capable persons of good moral character to instruct them in the mode of agriculture suited to their situation; and for teaching their children in reading, writing and arithmetic, and performing such other duties as may be enjoined, according to such instructions and rules as the President may give and prescribe for the regulation of their conduct in the discharge of their duties."

At the present time the Office of Indian Affairs is a bureau of the Department of the Interior, and is presided over by an official known as the Commissioner of Indian Affairs. Each reservation is directly in charge of a bonded superintendent, who is responsible to the Commissioner for the proper and efficient conduct of the affairs of the Indians on his particular reservation, including their agricultural operations. Most of the reservations are divided into districts, each in charge of a farmer who resides therein and is furnished with transportation equipment in order that he may travel about and instruct the Indians in their agricultural work. This farmer must be personally acquainted with every Indian family in his district and thoroughly familiar with their industrial condition, needs and resources, so as to assist them to get the best results from their labours. The farmers are appointed from a register of eligibles who have passed the required Civil Service examination, in order to test their fitness for the particular work devolving upon them. They make frequent verbal and written reports to the Superintendent as to agricultural conditions in their respective districts, and the Superintendents submit regular annual reports to the Commissioner, besides such special reports from time to time as conditions may warrant.

That portion of the United States in which Indian reservations are located is divided into ten supervisory districts, each of which is assigned to an inspecting official, who makes periodical trips to the various reservations in his territory, for the purpose of determining and reporting upon the agricultural progress of the Indians and all other matters relating to the administration of their affairs. By means of such reports, the Commissioner is kept informed as to actual conditions, the degree of efficiency of the various Superintendents, farmers, and other employees, as a basis for such administrative action as he may deem necessary.

The present appropriation for agricultural work among the Indians reads as follows:

"For the employment of practical farmers and stockmen, in addition to the agency and school farmers now employed; for necessary travelling expenses of such farmers and stockmen, and for furnishing necessary equipment and supplies for them; and for superintending and directing farming and stock-raising among Indians."

Two hundred and fifty eight farmers are now employed and paid from this appropriation or other available funds.

The statement given below shows the number of Indians farming, the total cultivated acreage, the average acreage per Indian, and the value

of crops produced by the Indians each year since 1911, when the present statistical system was inaugurated :

Year	No. Indians Farming	Acreage Cultivated	Average per Indian	Value of Crops Raised
1911	24,489	383,025	15.6	\$ 1,951,672
1912	28,051	558,503	19.9	3,250,288
1913	29,216	595,331	20.4	4,021,392
1914	29,811	594,268	19.9	4,007,335
1915	31,956	664,539	20.8	4,790,968
1916	35,823	678,527	19.0	5,293,719

While it is preferred that the Indians purchase their own farming implements, seed, etc., yet where they lack the necessary individual funds for this purpose, the Government furnishes them with such supplies, in return for labour by the individual for the benefit of the tribe (on the reservation roads, bridges, etc.) to be paid for in cash in easy instalments on what is known as the reimbursable plan, explained below ; or, in the case of seed, to be returned in kind at harvest. Ordinarily the Government purchases articles of this kind in large quantities so as to get the benefit of lower prices, and then distributes them to the individual Indians on the conditions above set forth. Every Indian receiving property on the reimbursable plan must sign an agreement substantially as follows :

" Agreement entered into this tenth day of July, 1915, between John Smith of the Apache tribe of Indians, and F. W. Jones, superintendent and special disbursing officer for and on behalf of the United States of America, covering property, stock, or equipment purchased under the provisions of the Act of Congress dated May 18, 1914 from ' Industry Among Indians, 1915 '.

" It is hereby agreed that John Smith will pay to F. W. Jones, or his successors in office, the sum of One Hundred Dollars (\$100), in payments to be made as hereinafter mentioned, which payments are to be in full consideration for the property, stock or equipment, listed below, and receipt for which is hereby acknowledged by John Smith.

Item	Amount
1 farm wagon.	\$ 100.00
Total	\$ 100.00

" Payments to be made by said John Smith to the said F. W. Jones, or his successors in office, as follows :

Date due		Amount
Jan.	10, 1916	\$ 25.00
July	10, 1916	25.00
Jan.	10, 1917	25.00
July	10, 1917	25.00
Total . . .		\$ 100.00

" It is stipulated and agreed that the title to the above-described articles shall remain in the United States of America until payment in full has been made, and that in default of payment, or in case of failure to properly care for or have cared for, or use the same, the said superintendent, or his successors in office, shall take possession of said property as set forth in regulations approved by the Secretary of the Interior October 6, 1914.

" It is further stipulated and agreed that upon payment in full by John Smith of the amount of consideration named, that the title, free and unencumbered, of the articles mentioned shall pass to said John Smith.

(Signed) John Smith. "

Many of the reservations are best adapted to the live stock industry rather than farming. From the latest figures it appears that the Indians of the United States under Federal supervision own individually \$26,703,027 worth of live stock in addition to tribal stock held in common, valued at approximately \$2,121,412; Indians to the number of 43,309 being engaged in the live stock industry. In addition to the farmers, there are also employed fifty-three superintendents of live stock and stockmen who are charged with the responsibility for the successful conduct of this industry on sound business principles.

While the Indian Bureau is not under the jurisdiction of the United States Department of Agriculture, but maintains its own distinctive agricultural organization under the direction of the Commissioner of Indian Affairs, yet the officials and employees of that department have voluntarily placed their facilities at the disposal of this office for the benefit of the Indians wherever practicable. The Indians are further instructed in all the details of successful modern farming by stereopticon lectures by experts from the United States Department of Agriculture or the State agricultural college under a co-operative plan inaugurated two years ago; and through the medium of boys' and girls' agricultural clubs; and their interest and enthusiasm are developed by holding agricultural fairs where they exhibit their products in open competition with each other, suitable prizes being given, or in competition at conveniently located county or State fairs. Most of the reservation fairs are managed entirely by the Indians (under the supervision of the superintendent), who have organized associations for

this purpose. On many of the reservations the Indians also maintain farmers' clubs organized with a view to promoting their agricultural welfare.

The principal concern of the Service at the present stage of Indian progress is to make them producers instead of merely consumers, from which it necessarily follows that the greatest strength of its agricultural organization has been directed toward production rather than distribution. Therefore, no particular organization is maintained for the specific purpose of marketing Indian agricultural products, each Indian being permitted to dispose of his surplus crops wherever he pleases. The Superintendent, however, may advise them with respect to the best markets and must see that they obtain fair prices for their products.

Schoolroom instruction is given the Indian boys in the theory and principles of modern agriculture, which they must then apply in actual practice on individual tracts of land assigned to them on a farm maintained for this purpose, the crops produced being utilized for the partial support of the school.

The related subject of home economics among the Indian women is given much attention, involving, as it does, the preparation of food from the products of the soil, a force of sixty-eight field matrons being employed to instruct the Indian women in all that pertains to successful home-making and healthful living, particularly the preparation and serving of food. Theoretical and practical instruction on such topics is also given the Indian girls while at school.

Quantity and Value of Crops Produced by Indians. Fiscal Year 1916.

Produce	Quantity	Unit	Average Value	
			Unit	Total
Alfalfa hay, etc	237,605	Tons	\$ 8.05	\$ 2,032,641
Barley and rye	231,498	Bushels	.80	185,198
Corn	1,117,797	Bushels	.45	503,010
Oats	1,471,020	Bushels	.32	470,726
Wheat	1,430,830	Bushels	.95	1,359,288
Vegetables	—	—	—	742,856
Total				\$ 5,293,719

GREAT BRITAIN AND IRELAND.

AGRICULTURAL LABOUR IN IRELAND AND THE MIGRATION OF IRISH AGRICULTURAL LABOURERS.

OFFICIAL SOURCE :

REPORT AND TABLES RELATING TO IRISH AGRICULTURAL LABOURERS, presented to the Lord Lieutenant of Ireland by the Department of Agriculture and Technical Instruction for Ireland on 14 October 1916.

§ I. THE SUPPLY OF AGRICULTURAL LABOUR.

For many years there has been a marked scarcity of agricultural labourers in Ireland, and this has been intensified because numbers of them have joined the army since the outbreak of war. No statistics are available as to 1915 ; but for the pre-war period we have the census returns. The reports of the Irish Census Commissioners state however that a large proportion of the persons returned as general labourers may be assumed to be agricultural labourers ; and therefore the following table gives not only the number of agricultural labourers returned at each census from 1871 to 1911, but also the number of general labourers except those in the six county boroughs.

Year	Agricultural Labourers			General Labourers		
	Men	Women	Total	Men	Women	Total
1871	446,682	62,662	509,344	194,826	19,859	214,685
1881	300,091	36,036	336,127	104,647	9,396	114,043
1891	258,042	22,044	280,086	82,854	4,592	87,446
1901	217,652	14,219	231,871	76,870	2,165	79,035
1911	195,864	4,036	199,900	100,960	1,139	102,099

These figures show a very serious decline in the supply of agricultural labour, but they do not show the further and equally serious decline in efficiency. It is the best labour which has left the country, and farmers complain of the inefficiency of their labourers as much as of the difficulty of getting them.

§ 2. THE WAGES OF AGRICULTURAL LABOURERS.

Returns furnished by the District Inspectors of the Royal Irish Constabulary and by a number of representative farmers prove considerable variation in the rates of wages paid in 1915, even within each county. It is believed however that the following table shows the general rate for that year in the case of male agricultural labourers who did not live in free cottages or receive any allowances in kind.

	Ploughmen		Cattlemen		General Labourers		Boys	
	From	To	From	To	From	To	From	To
Leinster . . .	14s	15s 9d	12s 6d	14s 3d	11s 9d	13s 6d	8s 6d	10s 3d
Munster . . .	14s 9d	17s	13s 6d	15s 6d	13s	14s 9d	8s 9d	10s 6d
Ulster . . .	14s 9d	17s	13s	15s 3d	12s	14s 3d	8s 6d	10s 6d
Connaught . .	13s 6d	16s 6d	13s 3d	15s 6d	11s 6d	13s	7s 9d	10s
Average for all Ireland . . .	14s 3d	16s 6d	13s	15s 3d	12s	13s 9d	8s 6d	10s 3d

The value and number of allowances, where these are given in addition to a money wage, vary considerably, largely in accordance with the character of the farming, whether it be grazing, tillage or mixed farming. The allowances may include a free house and garden, a potato ground, milk, fuel or grazing, or some or all of these; and their estimated value is from about 4s 6d to 5s 6d or 6s a week. When full board and lodging are given they are held to be worth from about 8s 6d to 10s 3d a week.

Owing partly to the scarcity of labour, but largely to the further increase in the cost of living, the general rates of weekly wages in 1915 were higher by from 1s to 1s 6d., and the values of the weekly allowances by about 1s 6d., than the corresponding values in 1914.

The wages of temporary labourers also advanced in 1915 as compared with 1914. For men the usual daily wages in 1915 were from 2s 9d to 3s 6d at sowing time, from 3s 3d to 3s 9d during the haymaking, from 3s 6d to 4s during the corn harvest, and from 2s 9d to 3s 3d during potato digging. For women they were from 2s to 2s 6d for sowing, from 2s to 2s 9d for haymaking, from 2s 6d to 3s during the corn harvest and from 2s to 2s 3d for potato digging. The daily rates for casual winter work were from 1s 6d to 2s 6d.

§ 3. THE MIGRATION OF AGRICULTURAL LABOURERS.

a) *The Number of Migrants.*

In spite of the scarcity of agricultural labourers a number of them migrate each year for a season only, generally to Great Britain but in some

instances to parts of Ireland distant from their homes. Estimates of the number of such migrants, which are believed to be approximately accurate, have been based on (1) returns compiled by the enumerators of agricultural statistics, being the results of enquiries made in June of each year at the homes of the migrants; (2) returns furnished by the Registrar General as to the temporary emigrants from each Irish port except Dublin; and (3) returns furnished by the railway companies, for 1911 and previous years, as to the harvestmen who took tickets for journeys *via* Dublin. The following table shows these estimates:

Year	Number	Year	Number	Year	Number	Year	Number
1896	27,000	1901	28,000	1906	25,000	1911	15,500
1897	27,000	1902	27,000	1907	24,000	1912	16,000
1898	30,000	1903	25,000	1908	22,500	1913	15,000
1899	31,000	1904	25,000	1909	20,500	1914	13,000
1900	32,000	1905	25,000	1910	18,500	1915	13,000

The decrease which is here shown from 32,000 in 1900 to 13,000 in 1915 is very considerable,

b) The Places from which there is Migration.

More details are obtained from the returns by the police enumerators of agricultural districts made in June of each year, as to the persons who had then migrated or who intended to migrate.

These returns include only about 60 per cent. of those who actually migrated, yet they may be taken as typical; and the following figures, abstracted from these returns, as to the number of persons emigrating from each province, may therefore be considered as giving the proportion in which the migrants were distributed over the provinces.

	1911	1912	1913	1914	1915
From Connaught	6,848	6,867	6,547	5,438	5,258
" Ulster	1,824	2,097	1,988	1,735	1,845
" Munster	168	230	136	145	204
" Leinster	38	23	16	23	47
Total . . .	8,878	9,217	8,687	7,341	7,354

As regards only men over twenty years of age, it is calculated that the migration rate in 1915 for all Ireland was 5.3 per 1,000; for Connaught it was 27.2, for Ulster 3.8, for Munster 0.5 and for Leinster 0.1. The counties having the highest migration rates were Mayo 74.1 per 1,000, Donegal 30.5 per 1,000, Roscommon 13.7 per 1,000, and Sligo and Galway 7.0 per 1,000. In one Connaught county, Leitrim, the migrants numbered only 1.1 per 1,000.

From the Poor law Union returns, which concern women and men of all ages, the facts as to migration can be further localized. The highest migration rate in Ireland in 1915 was in Swinford union in County Mayo where 42 out of every 1000 inhabitants migrated. The next highest rates were 31.9 per 1,000 in Dunfanaghy, Co. Donegal; 29.8 per 1,000 in Westport, Co. Mayo; 28.2 in Glenties, Co. Donegal; 25.0 in Belmullet, Co. Mayo; 19.1 in Castlebar, Co. Mayo; 16.7 in Claremorris, Co. Mayo; 12.4 in Castle-reagh, Co. Roscommon; and 10.6 in Glennamaddy, Co. Galway.

The following figures, taken from the returns of the police enumerators, show the proportion of women who migrated each year to be unimportant.

	Men	Women	Total
1911	8,545	333	8,878
1912	8,789	428	9,217
1913	8,394	293	8,687
1914	7,112	229	7,341
1915	6,927	427	7,354

c) The Classes of the Migrants.

As regards the classes from which migrants are drawn 6,338 or 86 per cent. of those included in the returns of the police enumerators for 1915 belonged to the class of landholders — 1,578 being themselves landholders, 4,372 landholders' sons and 388 landholders' daughters. Of the landholders 227 had holdings which did not exceed 5 acres, 587 held from 5 to 10 acres; 425 from 10 to 15 acres; 166 from 15 to 20 acres; 78 from 20 to 25 acres; 35 from 25 to 30 acres; 23 from 30 to 40 acres; and 37 more than 40 acres. The larger holdings were chiefly rough grazing land and mountain land of low value.

d) The Places to which there is Migration.

The following table shows the percentages of the total number of migrant labourers from 1911 to 1915 who went, respectively, to England and Wales, Scotland, and Irish districts other than those in which they had their permanent home.

Year	England and Wales	Scotland	Irish countries	Total
1911	73.2	22.0	4.8	100.0
1912	65.8	27.3	6.9	100.0
1913	70.9	23.7	5.4	100.0
1914	69.4	27.0	3.6	100.0
1915	64.9	30.0	5.1	100.0

4,776 migrants were enumerated as going to England in 1915 and 4,584 of them came from Connaught — 3,706 or 78 per cent. from County Mayo alone. After haymaking in Lancashire and Yorkshire they usually find further employment in these counties at turnip hoeing etc. They then move to Lincolnshire and North Cambridgeshire for the corn harvest, and thence to Warwickshire, Staffordshire and Cheshire for potato digging. In 1915 their usual wage was about 25s a week, in addition to free lodging and fuel and an allowance of potatoes and milk or beer. At piece work they earned as much as 35s or even 40s a week.

The migrants enumerated as going to Scotland in 1915 numbered 2,205 ; and of these 1,579 were from Ulster, and 622 from Connaught — including 1,538 or 70 per cent. of the whole number from County Donegal and 565 or 26 per cent. from County Mayo. They were chiefly engaged on potato lifting, on which some of them spent twenty weeks. As a rule they start work in Ayrshire early in June and scatter over the country later in the season, and they return to Ireland in November. In 1915 they usually earned from about 25s to 30s a week, together with free lodging and fuel and sometimes an allowance of potatoes. On piece work they made as much as 35s a week.

English and Scottish employers bear testimony to the trustworthiness, skill and thrift of the migrants. They generally save from half to three quarters of their earnings and sometimes take as much as £20 home with them. The amount of their earnings and the rates of agricultural wages in Ireland, as these have been set out, go far to explain the continued migration in spite of the scarcity of labour in Ireland.

SWEDEN.

CONDITIONS OF LIFE AND WORK AMONG THE FORESTS OF VÄRMLAND, DALECARLIA AND NORRLAND.

OFFICIAL SOURCE:

SKOGSARBÉTARNAS LEVNADS OCH ARBETSFÖRHÅLLANDEN I VÄRMLAND, DALARNA OCH NORRLAND. (*Conditions of Life and Work among the Foresters in Värmland, Dalecarlia, and Norrland*, Stockholm, 1916.

INTRODUCTION.

On the occasion of a proposal made during the session of 1912, the Riksdag asked the government to have a report drawn up, as soon as possible, on the position of foresters and the conditions of their life in Norrland and in districts similarly circumstanced from the point of view of forestry. The government was further requested to take such subsequent measures as the report rendered advisable, laying the necessary proposals before the Riksdag if appeal to this body should be necessary.

The government commissioned the Administration of Commerce to make this report and bring forward the necessary proposals.

To discharge such a task it was requisite first to make a profound and impartial enquiry into the social and economic conditions in which this numerous class of workmen live and work. This enquiry was prepared and begun by the Administration of Commerce after consultation with competent persons, specially summoned; and was completed by the Royal Administration of Labour and Social Thrift, on which body the earlier duties of the Labour Office, a department of the Administration of Commerce, were incumbent after 1913.

The report embraces not only Norrland but also the northern districts of Dalecarlia and Värmland, in which the conditions of the foresters' lives are analogous to those in Norrland; and it concerns not only the foresters proper but also the men employed on floating timber, charcoal burning and such tasks. Its material has been collected by means of several different statistical enquiries. In order to obtain an inclusive view and to discover the general conditions of life and work among the men employed in the forests within the whole sphere of the enquiry, a system was organized of consulting a large number of official doctors, inspectors of forests, associations of employers and of labourers in the forest industry, and delegates of the communes nominated by the societies of rural economy. From this combination of official authorities, associations and competent persons 615 answers were received to a special form of questions. On the basis of the

general data thus collected detailed descriptions of certain more limited parts of the zone of enquiry were established. Thus 173 forest holdings and ten charcoalburners' yards, which employed respectively, 8,360 and 151 workmen, were selected on the proposal of the departmental and forest administrations and the chief inspectors of forests, as offering types of the different natural and local conditions and the different methods of forestry; and in these in February and March 1913 an enquiry was made by some fifty special agents who collected on the spot, following a detailed questionnaire, data as to the conditions of work, housing and feeding. As regarded certain forest domains taken to be typical, additional individual data, on the subject of the working hours, the wages and the personal condition of all the employees, were furnished by the respective employers according to a special form.

The report, which is mainly based on material thus obtained, first treats of the conditions, the development and the present position of the forest industry in North Sweden. In this connection emphasis is laid on the abrupt and the profound transformation of the whole economic and social life of the population, and similarly of methods of cultivation, owing to the rapid development of the timber industry within a short space of time, that is within two or three generations. It is remarked that in this circumstance must be sought the origin of the very complicated social problems, which under the name of the "questions of Norrland" have latterly attracted much attention from the public and from the government. Among these problems is that of the forest workpeople, and it is connected with the problem of improving conditions of life among this most important class of society to which belong, more or less, the whole male rural population of Northern Sweden, some 150,000 persons.

§ 1. THE EXPLOITATION OF THE FORESTS.

The legal person, whether individual or corporation, who is the true ultimate employer of labour on forest holdings is the landowner. Often, however, the landowner sells the standing timber, which is then exploited not on his behalf but on that of the purchaser, who thus becomes the employer, properly so-called. The difference is very important to conditions of work, for it is in the nature of things that a limited liability company, for example, should have more desire and ability to ensure good conditions to its forest labourers, when there is question of a long projected tree-felling within its forests, than when the question is one of making the quickest possible use of a purchased right of exploitation. In 48 per cent. of the holdings covered by the enquiry the owner of the timber was also the landowner; in 52 per cent. he was not. Of the forest workmen 62 per cent. were employed by landowners exploiting their own forests and 38 per cent. by purchasers of timber. As regards the different categories of owners of woods the enquiry shows that the State and the communes have never practised tree-felling except on their own lands, and that rural landowners have done so on land not their own only exceptionally. Companies have however cut down purchased

woods as often, and timber merchants three times as often, as their own woods.

On forest holdings the landowning employer is generally represented by keepers or other employees ; but such supervisors are too few to be able to exercise over workmen scattered over large forest areas the effective control possible in manufacturing industries. This is the defective side of the organization of work in the forest industry, and gives it quite another aspect than manufacturing industries ; but on the other hand the rural population of Northern Sweden enjoy the advantage of a strong business sense and show a much developed spirit of initiative.

The carters form the most important category of forest labourers, each of them being responsible for one or more of the lots forming sections. The woodcutters and other labourers — the loaders, the roadmakers, etc. — should properly be considered as carters' assistants for they are most frequently engaged and paid by the carters.

As regards the proportionate size of the different groups of labourers, the enquiry shows that of a total number of 8,360 the carters form one third, the woodcutters rather more than a half, and labourers of other kinds about a sixth. But the proportion in the different departments deviates considerably from this average, partly owing to differences in the method of work.

The facts which have been collected give some information as to the age and civil status of the workmen. Ninety-two per cent. were found to be over eighteen years old ; the large majority of the 8 per cent., who were under that age, being employed as woodcutters. Of the total number of adult workmen 52.7 per cent. were bachelors, and 47.3 per cent. married men, widowers or divorced men ; these percentages being 32.1 and 67.9 in the case of the carters, 65.6 and 34.4 in that of the woodcutters, and 55.4 and 44.6 in that of the other workmen. The differences in these percentages are closely connected with the unequal distribution of men of the same age in the several categories of workmen, but are also due to the fact that the workmen are derived in very varying proportions from the different classes of society.

If the extent to which the three chief classes of the population — the landowning cultivators, the leaseholders and the labourers — are represented on forest holdings in the various districts be examined, the following results are obtained :

		Department of Värmland	Department of Kopparberg	Department of Gävleborg	Department of Väster-norrland	Department of Jamtland	Department of Västern-botten	Department of Norrbotten	Total Zone of Enquiry
Out of 100 workmen there were	Landowners	47.7	63.1	18.3	38.2	35.5	52.6	55.6	41.2
	Leaseholders	16.3	17.0	20.6	15.8	10.5	21.9	13.3	17.0
	Labourers	36.0	19.9	61.1	46.0	54.0	25.5	31.1	41.8

It is seen that the deviations from the general averages in the several departments were considerable ; and as — at least in forest districts — the

rural population regularly seek winter employment in the forests, the departmental averages reflect to some extent the different composition of the population in the several districts.

If all the departments be considered together it is found that the land-owning cultivators who take part in exploiting the forests together with their families belong as to 69 per cent. to the local population while 31 per cent. are strangers. The leaseholders and their sons are domiciled as to 67.9 per cent. on lands belonging to the owners of the wood, as to 32.1 per cent. on lands in other ownership. In the general group of labourers three subdivisions can be distinguished: 41.4 per cent. who worked in the forests all the year round, 44.5 per cent. who in certain seasons were employed on agriculture, and 14.1 per cent. who were employed on the forest industry for periods of time (craftsmen etc).

If the proportion in which special occupations are peculiar to certain social groups be examined, it is found that of the landowners and leaseholders, respectively, 43.0 per cent. and 48.9 per cent were carters, 42.4 per cent. and 36.9 per cent. woodcutters, while 14.6 per cent. and 14.2 per cent. followed other special trades. In the group of labourers the corresponding percentages were 12.8, 66.9 and 20.3. A carter, as has been said, is usually responsible for the exploitation of a forest lot; and may therefore be assumed to have a certain authority and economic independence; very rare in the class of simple labourers, and found rather among the landowners and leaseholders, and especially among such of them as have reached a certain age and position. Generally the carters manage farms large enough to support horses. They employ as woodcutters and for other labour their own sons and their sons-in law and farm-servants in the first place, then their relatives, friends and neighbours. Usually they avoid engaging unknown journeymen workmen, for these are considered to be untrustworthy and likely to trouble the friendly and confidential relations between a carter and his assistants which are an indispensable condition of good and profitable work. The amount of the revenue now derived from forestry in North Sweden, in spite of the inadequate number of the supervisors, is largely due to the fact that this industry is served by numerous bodies of workmen among whom there is this good understanding between chiefs and subordinates.

The prevalent conditions have not failed to affect the labour contracts customary on forest holdings. These are usually in writing: they were so in the case of 157 (90.8 per cent.) of the holdings covered by the enquiry and 88.4 per cent. of all the workmen. In 1.7 per cent. of the places investigated contracts were made with outside employers, in 19.7 per cent. with one or more carters commissioned by the others, in 68.2 per cent. with all the carters, and in 1.2 per cent. with the carters and woodcutters together. The report gives a detailed account of the terms of contracts, reproducing a certain number of them as being typical. It treats of complaints made as to some of their provisions, as for example those concerned with the system of fines, the form of engaging woodcutters, the liability of carters for accidents

attendant on labour, the effect of the system of contracts on the price of labour, etc.

Tree felling takes place principally in winter and the duration of the forestry season depends consequently in the first place on the very variable duration of the snow in different places. It is influenced also by many other circumstances, as by the greater or less amount of local forest enterprise, local customs, etc. In the whole zone of enquiry it may be said that there is a normal forest exploitation season of seventeen weeks or four months, a little less in the more southern and the coast regions and a little more in the north and in the forest regions of the interior.

It must however be possible only quite exceptionally to carry on the work on all the working days of this period, which should rather be looked upon as the season in the gross. Farmwork, holidays on feastdays, journeys to get provisions and for other reasons, all take time which must be deducted from the actual working days of a forest exploiting season, which actually is far from attaining to its maximum length but covers from fifty to a hundred days.

As regards the average number of working hours in a day these are usually seven or eight in the first part of the season, hours of rest being deducted. When in February the days become lighter the net hours of work are lengthened to an average of nine or ten.

These data chiefly concern woodcutters. A carter's day is usually longer, carters having to give much time to the care of their horses and means of transport. Special circumstances often make the length of their working days irregular. It appears that they work on Sundays only exceptionally, usually on the execution of repairs or on other tasks enabling the normal course of the weeks' activity.

Work on forest holdings is almost invariably piece-work and is paid for according to its quantity, irrespectively of the time spent on it. It follows that to establish statistics as to the workmen's wages and earnings is especially difficult and is possible only in a limited degree. To obtain the most certain data possible a certain number of enquiries were however organized, the results obtained being used to check each other, mutually. Thus on the one hand information as to the normal daily wages of carters, woodcutters and other workmen were collected from the authorities and from competent persons in the various districts, and on the other hand the local investigators calculated the average amount earned by a day's work in the places they visited. Finally with respect to a certain number of these places the real gross and net earnings of the workmen were established from wages-lists supplied by the employers. From the chief results of the enquiries the following averages can be deduced. They do not however show the notable variations in wages according to districts and to individual holdings, or their variations among the different workmen in one place.

	Department of Värmland	Department of Koppar- berg	Department of Gävle- borg	Department of Väster- norrland	Department of Jämt- land	Department of Väster- botten	Department of Norrbotten	General Average
<i>Carters (horse and man)</i>								
Average daily wage according to:								
Data furnished by commune	(¹) 6.94	8.31	7.51	6.84	8.78	6.32	6.78	7.26
» » » local enquiry	7.56	9.33	10.63	7.21	8.16	6.86	7.27	8.40
» » » wages-list	(8.69)	(7.73)	10.58	7.06	9.78	6.56	7.50	8.64

Woodcutters

Average daily wage according to:								
Data furnished by commune	3.05	3.99	3.60	3.38	4.23	3.06	3.32	3.51
» » » local enquiry	3.23	3.91	4.51	3.22	3.62	3.17	3.49	3.68
» » » wages-list	(4.16)	(4.06)	4.89	3.15	3.96	3.00	3.62	3.97

(1) All these figures express numbers of crowns. 1 crown of gold = about 15 1/4 d at par.

From these data it must not be concluded that the earnings discovered by local enquiries and from wages-lists for the season 1912-1913, which was as regarded snow a bad season, were generally superior in amount to those which seem from the data supplied by the communes to be normal. The difference arises chiefly from the fact that the latter data are of fairly comprehensive derivation and thus represent general conditions in the respective departments, while the enterprises which have been the object of special enquiry are chiefly situated in forest areas in which conditions of lodging and provisioning are difficult, and the price of work therefore reaches a higher level than in agricultural areas.

Where the forest to be exploited is at a distance, in the interior of the forest areas, workmen can neither live nor eat at home. They must live on the provisions they bring with them or buy on the spot, and these are naturally limited to a small range of articles of diet, easily cooked and kept — chiefly bacon, bread, butter, flour, coffee and sugar. With these they prepare their own meals. The idea of engaging special assistants, generally women, to cook and do housework has lately arisen, especially in the southern parts of the zone of enquiry. The truck system, which obliges workmen in one way or another to buy their provisions from their employer, the foreman or a special dealer, may not now be followed in any of the woods under exploitation. The lack however of a common organization for the procuring of stores and the cooking of food, the waste of foodstuffs, the defective cooking, the increased consumption and the increased prices due to the distance over which transport is necessary — all this causes the cost of living to be fairly high while works of forestry are being conducted. The average daily cost is placed at 1.50 crowns for a man and 2.50 crowns for

a horse, that is 4 crowns for a man and horse. These figures must be remembered when the data we have reproduced as to the earnings of forest labourers in the various districts and enterprises are estimated.

Special attention has been given to housing accommodation because the enquiry was provoked by complaints as to the manner in which the forest labourers were lodged and the frequent defectiveness and inadequacy of the temporary forest huts.

The labourers of course endeavour to live at home as much as they can. Failing this possibility they use any space available in the farms and houses of tenants and in shepherds' cottages, and if these do not suffice more or less temporary huts have to be built for them. Of all the labourers employed on the forest holdings investigated, 37.1 per cent. were lodged on farms, 5.6 per cent. in cottages and 57.3 per cent. in forest huts. They were most frequently lodged in the houses of inhabitants in the departments of Värmland, Gävleborg and Västernorrland; in the other four departments they were mainly accommodated in forest huts. They were lodged in cottages in any large proportion only in the departments of Kopparberg and Jämtland. Labourers lodged in farms and cottages lived far further from their work than those inhabiting the huts, which in a third of the cases were situated at the place of work.

Detailed information was obtained as to the accommodation of 1,512 of the 3,103 forest labourers lodged on farms. They shared with 773 persons belonging to the farms 447 rooms of which 390 were dwelling-rooms and kitchens and 57 wash-houses and similar offices. The rooms varied in size but the average floor area was 22.1 square metres (1) and the average cubic area 52.2 cubic metres (2). All the lodgings were provided with windows and fireplaces, generally an open fireplace or a kitchen stove. As regarded sleeping accommodation there were generally beds or recesses taking the place of beds, but in ten cases there were not enough beds and the workmen had to sleep on the floor. As regarded the quality of the lodgings 13.3 per cent. of the rooms in dwelling houses were characterized as draughty, 10 per cent. as cold, 1.3 per cent. as damp and 1.5 per cent. as smoky. Of the lodgings in outhouses the following far larger percentages had the same respective defects: 36.8, 42.1, 1.8 and 3.5. On an average five persons were lodged in one room which meant much crowding. The average floor area for each person was 5.6 square metres, the average cubic area 13.5 cubic metres. In the case of only 5.9 per cent. of the workmen thus lodged the cubic area enjoyed by each was more than 20 cubic metres; in the case of 32.5 per cent. it was between 10 and 20 cubic metres; and 61.6 per cent. must therefore be considered to have been lodged in extremely overcrowded rooms.

The shepherds' cottages are of the same type as the other cottages in their respective districts; but they are older and have smaller rooms and more primitive arrangements, and above all they are built not for the win-

(1) 1 square metre = 1.196 square yards.

(2) 1 cubic metre = 1.308 cubic yards.

ter but for summer. In these huts 471 forest labourers were lodged in eighty rooms, of seventy five of which we have descriptions. All the huts had windows and generally they were heated by open fireplaces. As sleeping accommodation there were usually recesses or beds, but in twenty-one rooms there was only a common camping place. Draughts were a subject of complaint in 53.3 per cent. of the rooms, cold in 46.7 per cent., damp in 5.3 per cent and smoke in 2.7 per cent. The percentages are much higher than in the case of the farms. On an average six persons slept in one room which meant that they were very closely packed. Each person enjoyed on an average 3.3 square metres of floor space and 6.9 cubic metres of air. Only 0.2 per cent. of all the workmen so lodged enjoyed 20 cubic metres or more of air and 7.5 per cent. from 10 to 20 cubic metres. For the others, that is 92.3 per cent., the allowance of air was less than 10 cubic metres a head, and therefore there was incontestable overcrowding.

As regards the temporary forest huts they are of many types determined by the various needs of forest labour and local custom. Behind these local variations several principal types can be discerned. The *eldpall* or *fire hut* is a wooden hut with a roof sloping to a central pitch which has in the middle of its room an open hearth (*eldpall*), a sort of rectangular box made of tree-trunks and furnished with sand and earth, on either side of which are common camping places. The chimney-hut is a charcoalburner's hut for from two to four men and has long, sloping walls, covered with earth or other substance, a stone or brick chimney at one end, and one or two camping places beside the walls; or in some cases it has straight walls, and a big fireplace against one wall or in a corner, which therefore draws better than the fireplaces of fire huts. Of the 521 forest huts inhabited when the local enquiries were made 52.2 per cent. were fire-huts and 47.8 per cent. chimney-huts. Of the 4,821 labourers lodged in huts 67.8 per cent. and 32.2 per cent., respectively, dwelt, in huts of the two types, the greater percentage inhabiting the fire huts because each of these housed on an average twelve persons, while the average chimney-hut, which was only half as large, housed only half as many.

Such temporary dwellings as the forest huts, intended to be used only for a short time, were usually more or less good or bad according to the period at which they were built. Three hundred and three or 58.2 per cent. of them were old, dating from the time of earlier tree-fellings, and had hardly been brought into a habitable state, while 218 or 41.8 per cent. had been built for the tree-felling of the current year.

It is noteworthy that only 26.1 per cent. of these new huts had been built in summer — 73.9 per cent. in winter —, although if building be begun after the soil is frozen it is almost impossible to make warm dwellings which are not draughty. The building of forest huts in winter is generally, especially in the northern departments, not undertaken by an owner on his own soil; but follows on the annual sales of standing timber by the State at the end of the autumn. Complaints on this subject have not been barren of results; and steps have recently been taken to time the sales so that they al-

low the preliminary work necessary to the exploitation of forests to be undertaken in the propitious season.

Half the new huts had been built by the owners of the forests or the trees; half by the workmen themselves, with or without compensation. Huts built by employers are generally very superior to those which the labourers have been able to make for themselves. A mistaken economy has caused the latter to be constructed as cheaply and quickly as possible, regardless of considerations of hygiene. A fire-hut is said usually to cost 100 crowns in addition to the wood used for it, and the little chimney-huts of the charcoalburners' type only half as much. The cost of the larger and better equipped huts is sometimes two or three hundred crowns or even more.

Most of the huts examined were built of dead and dry pinewood, but green wood had been used to build quite a third of them, either wholly or partially. The roofs were made of split trunks or boards, a layer of mud or other substance being inserted to conserve the heat, and the whole being in most cases crowned by a sloping roof, off which the water ran, made of split trunks, boards, shingles, tarred cardboard, birch bark or similar material. The floor was generally of beaten mud, only about a fifth of the huts, and those generally chimney-huts, having wood floors. A third of the huts had no window, the others a sort of skylight a few inches square. We have already mentioned the fireplaces. As sleeping accommodation three fourths of the huts had common camping places while in the others there were beds or box-beds.

As regards the general conclusions made by the local investigators as to the huts they examined, the fire-huts, with their central fireplaces, their large outlets for smoke and other openings, were found to be more defective than the more compact chimney-huts. Of huts of the former type 62.1 per cent. were called draughty, 47.1 per cent. cold, 39.7 per cent. damp and 54.8 per cent. smoky; while among huts of the latter type these percentages were, respectively, 37.8, 25.7, 25.3 and 28.9.

The ground area of one of these forest huts is on an average that of one inhabited room — 22.9 square metres; but since the roof is lower the cubic area is proportionately small, averaging 42.9 cubic metres. Since most of the forest huts were built and equipped exactly to meet determined needs the number of their inhabitants is less variable but also much larger than that of the farm lodgings. If all the huts be taken together the average ground area for one person is found to be 2.8 square metres, the cubic area 5.4 cubic metres. The average ground area for one person is 2.8 square metres in the fire-huts, considered separately, 3.1 square metres in the chimney-huts, while the average cubic area is 5 cubic metres in the fire-huts and 5.8 cubic metres in the chimney-huts, overcrowding being thus most acute in the fire-huts. In huts of both kinds the space allotted to one person is very inferior to the minimum generally considered hygienically necessary. However exigencies in the matter of cubic area can and should be different and considerably less when there is question not of closed rooms but of temporary and scattered dwellings, having many di-

rect outlets to the open air. Yet even if the huts be judged as temporary lodgings and with due regard to the special conditions of forest life, a large number of those at present existing must be held to be decidedly inadequate and a larger number to be extremely overcrowded.

§ 2. TIMBER FLOATING.

When in spring the workmen employed on the winter tree-felling are distributed over different branches of labour, about a tenth of their number seize the opportunity for work offered by timber-floating, which industry is generally managed in this country, technically and economically, not by the private owners of woods but by timber floating societies formed according to certain rules. The work is one which needs much strength and endurance, and it is therefore the young foresters who become floaters. Consequently a relatively large number of the floaters belong to the class of labourers; while in the class of forester landowners and leaseholders not the heads of families but their sons and other relatives, who are not absolutely needed for agriculture in the floating season, engage on the work.

The conditions of timber-floating are characterized, like those of forest exploitation, by the independence and responsibility of the labourers, or rather of the working gangs, as a consequence of the small number of workmen and the scattered and changing places of work. These circumstances determine the character of the labour contracts customary in the case of timber floating. They are usually contracts for piece-work concluded with a land-owning cultivator or a leaseholder living near the stream of water, or with some other person accustomed to the local timber-floating. The contractor undertakes to ensure the floating of the wood in a certain district, he employs his servants and neighbours or engages additional labour for the purpose. These contracts are also concluded with gangs of a greater or less number of workmen who assume collective responsibility for the work which they do under the direction of a foreman chosen by themselves.

On the streams and the affluents the work generally lasts about four weeks, from the middle or end of May to St. John's day. On the large rivers the season is longer, but it is by no means the same along the whole course of a river: in the lower reaches the larger quantity of floated timber lengthens it, so that near the mouth, especially near the barriers where sorting takes place, it often lasts throughout the summer. An average working day lasts 12.4 hours on the smaller streams, 11.7 hours on the large rivers; but these averages are highly abstract for the work is most irregular. Sometimes the floaters merely supervise; sometimes even, for days together, they are quite idle; but at other times their working capacity is taxed to its utmost physical limits, on occasion for several days and nights on end.

Although timber-floating is mainly piece-work the wages and earnings of those engaged on it are far less easy to discover than the earnings of the other forest labourers. The regular average daily wages of timber-floaters in the different departments appear from the following table:

Average Daily Wages in Crowns.

	Depart- ment of Värmland	Depart- ment of Koppar- berg	Depart- ment of Gävle- borg	Depart- ment of Väster- norrland	Depart- ment of Jämt- land	Depart- ment of Väster- botten	Depart- ment of Norrbotten	General Average
<i>Timber Floating on</i>								
Tributaries.....	2.99	3.83	3.71	4.54	4.02	4.37	4.63	4.14
Chief rivers.....	3.16	4.00	3.78	4.00	4.30	3.72	4.17	3.94

Food is provided and prepared during the timber-floating season as during the winter forestry season, certain modifications arising naturally out of the difference of conditions, place and time of year.

The question of lodgings during the spring timber-floating on the streams and their affluents presents the greatest difficulties. Especially in the northern part of the zone of enquiry atmospheric conditions are still severe, the temperature is near zero (Fahrenheit) and there are even falls of snow, and dwelling houses are rare in these districts. Often the men are obliged to pass their hours of rest in the open air beside a fire, beneath a temporary roof or a boat turned upside down or with nothing to shelter them against the rain except a reindeerskin, a bed of pine branches or something else of the sort. When timber-floating reaches the chief rivers there is a notable improvement in the conditions in which labourers are lodged. As we have already said a large number of them live at home, but even the others find good lodgings, the custom being to travel with the floated timber until some farm is found. Where the floating routes pass through sparsely populated forest regions the timber floating societies have, especially of late years, spent much trouble and money in establishing the lodging accommodation which is as necessary to the profit of the enterprise as the workmen themselves. Generally the different types of forest huts have been taken as models; but as the floaters' huts are intended for more permanent annual use than the foresters' huts they are generally built more solidly, with higher roofs and larger windows.

§ 3. CHARCOAL BURNING.

As well as the exploitation of forests and timber-floating, charcoal-burning is from the economic and social point of view one of the most important forest industries. The report deals however only in passing with that production of charcoal which has for long been one of the most important elements in intensive forest exploitation in the factory regions. It is more closely concerned with the charcoal-burning in forests which largely conforms to the system of extensive forest economy still followed in the north of Sweden. This forest industry aims at utilizing the tree-tops and other remains after the trunks have been cut up, and above all the large

quantity of dead trees, standing or fallen, which cover large areas in the forests of Norrland.

The employer in the case of charcoal-burning of this type in the forests is generally a firm owning a sawmill, a charcoal company or some individual — a cultivator landowner, a leaseholder or a rural tradesman who trades in charcoal to a greater or less extent. In certain districts, especially in Upper Norrland, charcoal production is undertaken as a domestic industry by labourers and small cultivators who buy dead wood and other waste in the State forests, cut it up, burn it, and sell the charcoal to traders or to ironworks directly.

Small cultivators as well as landless workmen take part in the charcoal-burning in the forests. The proportion in which the different social groups are represented in the industry appears from the following figures : of 151 workmen employed in ten charcoal-burning yards which were the object of an especial enquiry, sixty-seven belonged to the landowners' class, eight to that of the leaseholders, seventy-six to that of the labourers. The chief group of labourers employed on charcoal-burning is that of the charcoal-burners, each of whom usually contracts to manufacture a fixed quantity of charcoal for a fixed payment. Where charcoal is manufactured in the forests by a more or less primitive method the charcoal-burners cut the wood for themselves and with their own or with hired horses transport it to the stacks, whence they also transport the charcoal, when it is ready, to the loading places. Where the technique of charcoal-burning is more advanced the charcoal burners generally engage special carters, woodcutters and other workmen whom they pay themselves and who should be considered as being in some degree their assistants.

The charcoal-burning season ordinarily lasts about six months in the forests of Norrland. It was sufficiently difficult to obtain precise information as to the length of the working day, but as far as cutting and transporting the wood, setting up the stacks and transporting the charcoal are concerned, the work generally coincides with that of exploiting the forests as we have described it. When however charcoal burning is in progress the work is more irregular, for at certain times it is necessary to watch the stacks night and day. On these occasions Sunday work is inevitable, but it is always exceptional.

As regards pay, the workmen employed on charcoal-burning generally earn from three to four crowns a day, approximately, and the carters about twice as much for the work of a man and his horse. On the whole charcoal-burning in the forests seems to be a little less profitable to the workmen than tree-felling, especially where natural conditions are not very favourable, and where the industry is relatively new and the population not very familiar with the process of making charcoal. The work is however sufficiently sought after ; a circumstance explained by the fact that for reasons of transport it is limited to the neighbourhood of means of communication, namely the district within one or two Swedish miles of a railway station, and the workmen usually live at home or in the vicinity and are employed on agricultural labour at certain times of the year.

Consequently provisioning is less difficult than in the case of workers employed on forest exploitation. On the other hand an almost greater number of special temporary dwellings are needed, for workmen employed on charcoal-burning prefer to live in huts, even if they work near their homes. Of the workmen employed in the investigated charcoal-burning yards only 11.3 per cent. lived at home, the other 88.7 per cent. living in especially built huts. The reasons for this circumstance are first the very dirty nature of the charcoal-burning work and the fact that the workmen do not wish to dirty their own homes, and secondly the constant watching which the stacks need during a large part of the charcoal-burning period.

The huts inspected were generally of the type already described, and all that has been said as to the construction of the forest chimney-huts applies to them. Generally the charcoal-burners' huts were no larger than the forest chimney-huts, their floor area averaging 14.4 square metres and their cubic area 29.2 cubic metres. The average floor area for one person was 4 square metres, the average cubic area 6.8 cubic metres: that is to say that the density of population was less than in the huts of the forest exploitation enterprises.

§ 4. SEASONAL AND CONSTANT LABOUR IN THE FOREST INDUSTRY.

Forest cultivation and timber-floating in the spring; trench digging, tree marking and woodcutting for charcoal and for paper pulp in summer; charcoal-burning and tree-felling in autumn and winter — such are the labours offered by the forest industry in the north of Sweden, and those on which the labourers are in turn employed during the year. The proportion of work varies however very much in the different branches of the forest industry, so that the foresters are obliged, in order to earn a living, to pass at certain times into other industries, such as agriculture, sawing, boat loading, roadmaking, canalization, etc. These changes are not unaccompanied by notable losses of time and by difficulties, as is proved by the periods of unemployment from which foresters are liable to suffer unless they are also agriculturists, especially in spring when the winter season is over and the autumn labours have not yet been resumed. During these times of unemployment the workmen totally exhaust any savings they may have and are even forced to run into debt. This circumstance, added to a lack of thrift and economy, chiefly explains the contrast often noticed between the earnings of foresters, which are often considerable, and their bad economic situation. This is not however the only consequence of the periods of unemployment: reaction is in some degree natural after the privations of forest life, and unemployment gives a free field to the temptation which is irresistible, especially in the case of young bachelor labourers, to spend savings on drink or other similar pleasures, to the detriment of moral and physical wellbeing.

Among the principal methods which might remove the causes of unemployment there is on the one hand the development of employment bureaux,

on the other the more frequent engagement of foresters, to fill fixed posts for a whole year or its greater part, who would be permanently connected with public or private administrations.

This question forms the subject of an especial study based on the conditions discovered in certain domains in which the different systems of forest economy are typically represented. In domains in which there was intensive forestry hardly more than a third of the workmen could be considered to be in permanent employment ; all the others were giving casual assistance. None the less the work of exploitation depended chiefly on the permanent employees, who supplied two thirds of the total number of working days and earned about 70 per cent. of the aggregate wages. On an average each permanent workmen had supplied during the year of the enquiry 177 days of work and earned 637 crowns, while for casual labourers the corresponding averages were 52 days of work and 167 crowns. Where forestry is on the extensive rather than the intensive system the permanent employees — keepers and others — formed only a framework of superintendents which was filled during the season by a number of casual workmen, temporarily engaged.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXVIII.
8TH. YEAR: NUMBER 6
JUNE, 1917.



ROME
PRINTING OFFICE OF THE INSTITUTE
1917

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Part I: Co-operation and Association

SPAIN.

THE FIRST CO-OPERATIVE CHEESE FACTORY.

SOURCES :

LA QUESERÍA MANCHEGA, La industria pecuaria (*The Making of Manchego Cheese. The Live Stock Industry*). Organ of the General Association of Ganaderos (*General Association of Stock Breeders*), 18th year, no. 544, Madrid, 20 February 1917.

§ I. ANTECEDENTS.

We have already mentioned (1), in speaking of co-operation in Spanish agriculture, the first attempt in Spain to treat milk co-operatively, made by the society called *Quesería Manchega*, which was founded at Infantes in the province of Ciudad Real. This society is concerned with the manufacture of the cheese perhaps most characteristically Spanish, the *manchego* made from sheep's milk.

The *Quesería Manchega* is the first co-operative society for the manufacture of cheese in Spain. It owes its foundation to the campaign in favour of dairy industries undertaken by the *Asociación general de Ganaderos*. A technical teacher of this association happened to be in the district of Infantes, undertook studies and experiments in the manufacture of the local cheese, and pointed out to the sheep farmers the advantages they would derive from the formation of a co-operative society which would improve their processes, make their product more uniform and lessen their costs of manufacture. The idea had no sooner been started than they received it favourably, and after a time of indecision, devoted to the study of the question, they decided to put the plan into practice. They then undertook the work necessary to the installation of the factory and the formation of its staff, relying above all on the support of the *Asociación de Ganaderos*.

The founders of this co-operative society had to conquer initial difficulties of every description, a fact which is comprehensible if it be remembered that the establishment of a business of a kind entirely novel in

(1) *International Review of Agricultural Economics*, March and May 1915.

Spain was in question, and that it was impossible merely to imitate similar enterprises in other countries from which the Spanish districts were distinguished by their particular conditions. Infantes lies moreover in La Mancha, without doubt the most individualized and the least social region in Spain. The obstacles encountered were not only technical but also social.

Among such social difficulties, side by side with those of them which were purely psychological, were some based on economic interests. In fact the greatest resistance to the innovation emanated from the master shepherds of the sheep farmer members of the society. This was due to the fact that previously each master shepherd had made the cheese derived from his flock, receiving certain indemnities at the period of manufacture, that he was the middleman for the sale of the skim milk, and finally that he enjoyed the enormous advantage of being able to instal all his family on the farm, on the pretext that they helped in the manufacture, and they thus were able to dispose of abundant cheese, milk, cream etc. The co-operative society eventually solved these problems without prejudice to the interests of shepherds or employers, either by employing the shepherds, as we shall see, on the processes of manufacture, or by suffering them to sell and derive profit from the skim milk, to provide wood and water for the factory, to transport the cheese to the railways or to pack it.

It was also no easy matter to accustom the cheesemakers to the new processes of manufacture, to cause them to observe standards of cleanliness and order previously unknown, and, above all, to teach them to treat large quantities of milk at one time. Finally however all these difficulties were met by the enthusiasm and conviction of the sheep farmers, whose numbers have continually increased as a consequence of the results obtained by the society.

§ 2. THE WORKING OF THE CO-OPERATIVE SOCIETY.

We have no data as to the organization of this society, and therefore, before we give an account of its activity, we will merely indicate how it has worked.

Two problems had to be solved before it could become active, that of the staff and that of the distribution of expenses and profits. The first of these was undoubtedly the more complicated, for owing to the system of sheep farming locally prevalent, as we shall see, cheesemaking lasts only for from eight-five to eighty-eight days ; and it is therefore naturally impossible to employ workpeople exclusively on this industry since they would thus be idle for nine months of the year. The problem is solved by appointing as master cheesemaker one of the shepherds in the employ of the members and others as assistant cheesemakers, the chosen men always having special skill in the trade. The factory pays these employees during the cheesemaking season, providing substitutes to do their ordinary work as shepherds.

The costs of installation are distributed in equal shares among the members. Ten per cent. of their amount is annually deducted from the society's profits and distributed among the members as interest and redemption quota on the capital of installation. The remaining profits are distributed among them in proportion to the quantity of milk each of them has supplied during the cheesemaking season.

The following are the only figures we have as to the quantities of milk supplied by the members, and refer to 1914.

Members	No. of days during which they supplied milk	Quantity of milk in kilogrammes (1)			
		Total	Daily average	Daily maximum	Daily minimum
No. 1.	67	23,709	334	526	204
No. 2.	60	12,846	214	262	101
No. 3.	88	15,003	170	259	49
No. 4.	87	7,338	84	114	32
No. 5.	76	6,168	81	105	31
Total . . .	88	65,064	739	1,190	49

(1) 1 kilogramme = 2.2 lbs.

The members are obliged to deliver perfectly strained milk and to bring it to the factory in vessels of tinned iron, quite full and hermetically sealed. In order to prevent the adulteration of the milk by the addition of water or other substances it is analysed on its arrival at the factory. For its transport the members have adopted a system of special carts furnished with awnings and so made that the vessels are exposed neither to the sun nor to rain.

For the installation of the factory the premises formerly used for cheesemaking by a member were chosen and were suitably transformed and enlarged. The factory now occupies a fine two-storied building covering an area of 300 square metres (2). On the ground floor are the reception room, the depot, two large rooms used as warehouses, two others used as factories, one for the boiler and stove, and the dwellings of the cheesemakers. On the upper story there are warehouses in which as many as 5,000 cheeses can be stored and which have all the conditions taught by science and experience to be necessary to the preservation of manchego cheese.

The disposition of the cheeses, the accommodation, the ventilation and the economy realized make these premises a true model for establishments of their kind.

(2) 1 square metre = 1.196 square yards.

§ 3. RESULTS OBTAINED.

The following are some data which resume the activity of the co-operative society during the three years which have elapsed since its foundation.

Year	No. of days for which the season lasted	Quantity of milk treated — kilogrammes	Profits realized — pesetas (1)
1914	88	65,064	22,585
1915	87	67,132	24,751
1916	81	51,262	23,300

These figures need some explanation. If the cheesemaking industry be always highly subject to variation it is so especially when the animals furnishing the milk which is its material are not stalled, for milk production is then intimately connected with the extent and quality of the pastures on which they graze. The difference in the quantity of milk treated from one to another of the three years considered should not cause surprise.

Cheese is made in Infantes in the spring, and it should be remembered that in 1915 there was an early and productive spring, whereas that of 1916 was late and little productive.

The difference in the prices realized is similarly explained, being partly due to the varying price of the cheese from one year to another. The co-operative society declares that the fact that the business had entered into a regular course of working contributed to the increase in individual returns obtained in 1916.

A fact which must at first sight cause surprise is that the manufacturing season of the *Queserta Manchega* should last only from eighty-one to eighty-eight days. This is due to local conditions of vegetation and to the difficulty of changing local customs in the matter of sheep farming. In order to lengthen the season and make a larger quantity of cheese it would be necessary to sacrifice the lambs soon after their birth and give fresh and abundant food to the ewes in order that they might yield milk for as long as possible. This is at present impossible in this district where the winter is long and unproductive and the spring very productive, so that the farmers keep the lambs in order to use the abundant pasturage. It is therefore only when the lambs can live without their mothers, that is in spring, that the ewes are milked for the purpose of cheesemaking, the practice being continued until the great heat of July begins to burn the fields. The position could certainly be modified by the intensive cultivation of forage plants and the stalling of the sheep, but this presupposes a complete change in the local system of sheep farming, which could be accomplished only after long study on the part of the farmers.

(1) 1 peseta = $0 \frac{3}{8}$ d. at par.

It is calculated that the flocks belonging to members of the *Quesería Manchega* comprise 6,000 ewes. As regards their yield it should be noted that, as is seen by the table referring to the season of 1914, the members do not all contribute milk on every day for which the factory works.

It may be said, to sum up, that the *Quesería Manchego* has attained to extremely satisfactory results. Since a first attempt at co-operative manufacture is in question, and since there is an increasing demand for its products owing to their superiority over others of the same kind, we may hope that farmers in other parts of Spain will follow the example which has been set them, to their own advantage, that of the industry and that of stock farming.

Already we can cite two other co-operative societies, founded under the auspices of the *Asociación general de Ganaderos* for the exploitation of dairy industries. They are the *Cooperativa Lacianiega* for buttermaking at Villablino in Leon, and the *Lechería cooperativa* established at Saragossa for the sale of milk by the local *Casa de Ganaderos*.

ITALY.

THE DEVELOPMENT OF THE CO-OPERATIVE MOVEMENT IN ITALY ACCORDING TO RECENT STATISTICAL DATA AS TO THE "LEGA NAZIONALE DELLE COOPERATIVE".

SOURCE:

ANNUARIO STATISTICO 1916 DELLE SOCIETÀ COOPERATIVE ESISTENTI IN ITALIA, ESCLUSE QUELLE CHE HANNO PER SCOPO PRINCIPALE L'ESERCIZIO DEL CREDITO (*Statistical Yearbook 1916 of Co-operative Societies in Italy, exclusive of such as have the affording of Credit as their Chief Aim*). Lega Nazionale delle Cooperative Italiane (*National League of Italian Co-operative Societies*) (Milan). Como, Tipografia Cooperativa Comense «A. Bari», 1917.

The Milanese National League of Co-operative Societies had already in 1903 published the first collection to appear in Italy of general statistics as to these societies. It had the support of the Ministry of Agriculture, Industry and Commerce and the assistance of another Milanese society, the *Società Umanitaria*; and the resultant collection was the *Statistica delle Società cooperative italiane esistenti nel 1902* (1). Recently the league has published a Statistical Yearbook of Co-operative Societies for 1916, excluding credit societies. The object of this publication is to "place in relief the importance of the Italian co-operative movement, paying special attention to those forms of co-operation which are recruited from the humblest classes". The book has 1500 pages and is the result of long and intensified labour in collecting and elaborating data. It is indubitably the most complete work of its kind which has yet appeared in Italy (2). It comprises: a) a list of all the existing co-operative societies; b) a

(1) This collection contained three statistical tables and an appendix. Table I. comprised 2199 societies and gave data regarding them having reference to 31 December 1901 and distributed in four groups (consumption, production and labour, credit, various) and according to the district in which they were situated. Of these societies 1714 comprised 567,450 members and owned a total capital of 74,121,046 liras. In Table II 2199 of the same societies reappeared, distributed in twelve classes according to their nature and the object of their social enterprise. Table III. gave 322 co-operative societies of Italians outside Italy. In an appendix there was a list of 335 co-operative societies existing in 1902, the data as to which arrived only after the two first table had been drawn up and printed. There followed the enumeration of eighteen institutions of propaganda and aid, such as the *Lega nazionale* and the district, provincial and local federations, and numerous tables.

(2) Other publications of the same kind have been printed by the offices of the *Direzione generale del Credito e della Previdenza* at the Ministry of Agriculture, Industry and Commerce. One of these, which appeared in 1908, is a mere list, showing the date at which the co-operative societies were formed and giving information as to their paid-up capital. Another which was more complete appeared in 1910, and the yearbook under review refers to this in making the comparisons by which it places in relief the progress of the movement from 1910 to 1915.

collection of tables giving information as to the development of most of the co-operative societies in the sixty-nine provinces of the kingdom, as regards each form of co-operation ; c) a collection of tables resuming the situation for each province and district and thus giving a complete picture of the development to which this organization has attained in Italy ; d) as an appendix a list of all co-operative societies entered in the registers of the existing prefectorates, federations and consortia. We will here reproduce the principal data contained in this yearbook.

§ I. THE NUMBER OF CO-OPERATIVE SOCIETIES IN THE KINGDOM AND THEIR GEOGRAPHICAL DISTRIBUTION.

It should first be stated that the league's researches concerned the following forms of co-operation : a) consumers' societies ; b) producers' and labour societies ; c) societies for the construction of popular dwellings ; d) agricultural societies ; e) insurance societies. In the case of the first four of these the aim was the discovery of the following data : 1) date of formation ; 2) number of members ; 3) capital shares, subscribed or paid-up ; 4) amount of the various funds, reserve and other ; 5) amount of business ; 6) profits ; 7) losses. Research of this kind was omitted in the case of the insurance societies owing to the great variety of their working.

There were, in 1915, 7,429 co-operative societies, as against 5,064 in 1910. They were distributed as follows :

	1915	1910	Difference
Co-operative consumption	2408	1756	+ 652
" production and labour	3022	1879	+ 1143
" building	752	379	+ 373
" agriculture	1142	925	+ 217
" insurance	105	125	- 20
Total	7429	5064	+ 2365

The co-operative societies of production and labour occur in the yearbook in sixteen sections, according to their objects, namely : 1) bakehouses, mills and slaughterhouses ; 2) miners, stoneworkers and cementers ; 3) wood and leather ; 4) ceramics and glass ; 5) fishermen ; 6) copyists and printers ; 7) mechanics and metallurgists ; 8) chemical industries, 9) electrical industries ; 10) clothing and textile industries ; 11) painters and decorators ; 12) journeymen, wheelwrights and navvies ; 13) carters, waggoners ; 14) porters' work ; 15) various ; 16) mixed.

The agricultural societies are divided into three sections : 1) agriculture and culture of special crops ; 2) viticulture and the vintners' industry ; 3) dairy farming and cheesemaking.

The figures given show that the number of co-operative societies increased by 2365 between 1910 and 1915. If insurance societies, which di-

minished by twenty (16 per cent.), be excluded, those of every other form are seen to have increased largely — the building societies by 98.4 per cent ; those of production and labour by 60.8 per cent. ; those of consumption by 37.1 per cent. ; and the agricultural societies by 23.4 per cent.

If the co-operative societies be distributed geographically the following comparison between 1915 and 1910 is obtained.

TABLE I. — *Local Distribution of co-operative societies.*

Districts	Co-operative societies									
	Consumption		Agricultural		Production and labour		Building		Insurance	
	1915	1910	1915	1910	1915	1910	1915	1910	1915	1910
Piedmont	277	188	95	84	151	109	33	14	64	75
Liguria	105	68	27	22	183	103	70	48	4	4
Lombardy	704	484	224	140	394	298	144	79	11	16
Venetia	191	143	95	84	322	174	59	27	2	3
Emilia and Romagna	338	157	216	214	886	555	133	61	2	3
Tuscany	358	267	42	38	239	131	127	75	4	3
Marches	111	105	26	22	78	46	10	6	—	—
Umbria	56	38	10	6	31	15	7	2	—	—
Lazio	28	16	65	61	226	184	122	48	6	8
Abruzzi and Molise	30	32	21	11	12	6	3	3	2	1
Campania	47	35	53	55	111	63	18	6	2	4
Apulia	40	30	64	43	146	85	13	5	—	—
Basilicata	6	2	10	11	14	8	6	—	—	—
Calabria	42	28	27	20	46	10	2	—	—	—
Sicily	63	53	145	105	159	82	3	1	4	4
Sardinia	12	6	22	9	24	10	2	4	4	4

We should also note the development of agricultural co-operative societies in Sicily, those of production and labour and of building in Emilia and Romagna, those of consumption in Lombardy, etc. Generally speaking societies are most numerous formed in the districts in which agriculture and industry are most developed.

In order to show more clearly the intensity of the co-operative movement in the various districts, we reproduce the following table in which the number of societies is considered in relation to the density of population in each district and the number of its communes.

TABLE II. — *Number of co-operative societies as compared to the population and the communes in each district*

Districts	Population in 1915	No. of Com- munes in 1915	Co-operative Societies			Classification	
			No. of co-ope- rative societies	No. of inhabi- tants for each society	No. of Com- munes for each society	according to population	according to number of communes
Piedmont. . .	3,472,958	1,489	620	5,601	2.40	Emilia	Emilia
Liguria. . .	1,244,015	305	389	3,189	0.78	Latium	Tuscany
Lombardy. . .	4,931,485	1,907	1,477	3,338	1.28	Liguria	Latium
Venetia. . .	3,665,536	798	669	5,479	1.19	Lombardy	Liguria
Emilia. . .	2,764,133	328	1,575	1,755	0.20	Tuscany	Apulia
Tuscany. . .	2,756,654	287	770	3,580	0.37	Marches	Sicily
Marches. . .	1,116,969	254	225	4,964	1.17	Venetia	Marches
Umbria. . .	703,802	152	104	6,767	1.46	Piedmont	Venetia
Latium. . .	1,361,337	228	447	3,045	0.51	Umbria	Lombardy
Abruzzi. . .	1,459,580	463	68	21,464	6.80	Apulia	Umbria
Campania. . .	3,377,824	623	231	14,622	2.70	Sicily	Piedmont
Apulia. . .	2,201,241	241	263	8,369	0.91	Calabria	Campania
Basilicata. . .	481,953	126	36	13,387	3.50	Basilicata	Basilicata
Calabria. . .	1,446,773	415	117	12,365	3.54	Sardinia	Calabria
Sicily. . .	3,743,447	362	374	10,009	0.96	Campania	Sardinia
Sardina. . .	870,077	363	64	13,594	5.67	Abruzzi	Abruzzi
All Italy. . .	35,597,784	8,341	7,429	4,791 ⁽¹⁾	1.12		

(1) In these calculations the total number of co-operative societies, as given in the list in the yearbook, is taken into account.

§ 2. THE NUMBER OF MEMBERS.

Of 7,317 co-operative societies of consumption, production and labour, building and agriculture, to which the league addressed itself, only 5,036 or about 70 per cent. supplied the desired data. Moreover the forms were not completely filled up, the number of members being omitted on some, and the amount of business, the capital, the reserve fund, etc. on others.

As regards the members we compare in the following table the number of them in the various kinds of co-operative societies in 1915 and in 1910 :

TABLE III. — *Number of members of co-operative societies.*

Classification of the co-operative societies	Statistics					
	1915			1910		
	No. of societies		No. of members	No. of societies		No. of members
	in existence	to which information refers		in existence	to which information refers	
Consumption	2408	1970	411,358	1764	1623	346,474
Production and labour	3015	1884	257,149	1871	1357	212,387
Building	751	471	91,812	379	315	49,466
Agricultural	1143	711	195,766	926	827	161,115
	7317	5036	956,085	4940	4122	769,442

Thus the membership of these co-operative societies increased altogether between 1910 and 1915 by 186,643. If it be remembered that 2,278 societies furnished no data in 1915 and 718 in 1910, and if it be calculated that each society has about 190 members, it is no exaggeration to place the total membership at 1,300,000, giving an increase of 400,000 since 1910. But the increase arises also from an increase in the number of societies, and therefore we must conclude that there has been no true progress in this sphere.

If finally each kind of co-operative society examined be considered separately, it is seen that while the average membership of a consumers' society fell between 1910 and 1915 from 213 to 208, and that of a production and labour society from 156 to 136, that of a building society rose from 157 to 195 and that of an agricultural society from 195 to 275.

§ 3. THE FINANCIAL BASIS AND THE BUSINESS OF THE SOCIETIES.

The financial basis of the societies appears from the following comparative figures for 1910 and 1915 :

		Paid-up Capital		Reserve & various Funds.	
		1915		1910	
Co-operative consumers' societies .	L.	31,617,205.72		L.	23,868,709
" production and labour societies	"	3,255,547.31		"	31,481,004
" building (1) societies .	"	32,257,311.45		"	43,109,237
" agricultural societies	"	21,687,867.42		"	15,687,199
Total	L.	118,817,841.90		L.	114,146,149

(1) The apparent diminution in the assets and reserves of the building societies should be ascribed to the fact that in the yearbook under review the special autonomous institutions for popular dwellings, of which many were formed after 1908, were by an error omitted.

Taken together the co-operative societies of various kinds possess property, paid-up capital and reserves of the average value of 23,593.69 liras and individual members are interested to the extent of 124.28 liras each. The average property of a consumers' co-operative society amounts to 16,049.49 liras, that is 76.86 liras a member; that of a production and labour society to 17,651.12 liras or 129.32 liras a member. The economic resources of other forms of co-operation are more important, as regards the average both for a member and for a society. This is easily explained. We have but to remember that by the law of 1908 as to popular dwellings the building societies were exempted from the provisions of the commercial code as to series of shares, which cannot be of more than 100 liras. In the case of agricultural societies it should be borne in mind that they include the large organizations for the distribution of fertilizers and seeds and those which, like the cheese factories and the collective cellars, treat products.

The turnover of more than 5,000 co-operative societies in 1915 was 648,248,972.82 liras, distributed as follows :

co-operative agricultural societies	liras	211,514,782.82
" production and labour societies . . .	"	163,732,001.14
" consumers' societies	"	156,841,214.87
" building societies	"	116,160,973.99

These figures would give for every consumers' co-operative society an average turnover of 79,614.82 liras. If the fact be recollected that only 1,970 out of 2,408 co-operative societies of this kind supplied information on this point it may be calculated, even if an average turnover of no more than 50,000 liras a year be ascribed to societies which did not respond, that the total annual value of the sales made by consumers' co-operative societies was 180,000,000 liras.

A comparison with the average turnover of each consumers' co-operative society, as shown by the statistics of 1902, reveals an increase of 11,170.58 liras, namely, one from 68,444.34 liras to 79,614.82 liras.

In the case of the production and labour societies this increase is much more marked, being one of 51,495.29 liras which raised the amount from 35,192.21 liras in 1902 to 86,588.10 liras in 1915. This is explained by the fact that all Italian laws facilitating the participation of societies of this kind in public auctions are posterior to 1902, as appears in an article on this subject which we published in our issue for November 1914.

§ 4. PROFITS AND LOSSES.

We will end our short examination of the figures given in the yearbook by showing the profits and losses resulting from these co-operative businesses. The total profits amounted to 11,236,722.18 liras and the total losses to 1,237,985.38 liras : and the net profits were therefore 9,998,736.80

liras. Profits and losses were distributed as follows among the various groups of societies:

Co-operative agricultural societies :

Profits	Liras	1,919,178.22
Losses	"	208,640.14
Net profits . . .		Liras 1,680,538.08

Co-operative production and labour societies :

Profits	Liras	4,625,237.83
Losses	"	484,105.42
Net profits . . .		Liras 4,141,132.41

Co-operative consumers' societies :

Profits	Liras	3,471,956.51
Losses	"	368,854.30
Net profits . . .		Liras 3,103,102.21

Co-operative building societies :

Profits	Liras	1,220,349.62
Losses	"	146,385.52
Net profits . . .		Liras 1,073,964.10

These figures are the best assurance of the soundness of Italian co-operative enterprise.

SWITZERLAND.

THE PEASANTS' UNION AND PEASANTS' SECRETARIAT IN 1916.

SOURCE:

DIX-NEUVIÈME RAPPORT ANNUEL DU COMITÉ DIRECTEUR DE L'UNION SUISSE DES PAYSANS ET DU SECRETARIAT DES PAYSANS SUISSES, 1916 (*Nineteenth Annual Report of the Managing Committee of the Swiss Union of Peasants and the Secretariat of Swiss Peasants*, 1916). Brougg, Secretariat of Swiss Peasants, 1917, 95 pages.

The nineteenth annual report of the managing committee of the Swiss Union of Peasants and the Secretariat of Swiss Peasants treats of the activity of these two institutions in 1916, shows its results, adducing evidence, and publishes data relative to the finances of the institutions.

We will examine this important report and resume its chief parts, as we have done in the case of reports of earlier years.

A. — SWISS PEASANTS' UNION.

§ I. SOCIAL POSITION AND ACTIVITY OF THE UNION IN 1916.

In the beginning of 1916 the Swiss Peasants' Union had twenty-eight sections which comprised 197,761 members. During the year one new society adhered to the union and was admitted as forming a new section. This was the *Fédération des sociétés de mise en valeur du lait de la Suisse Centrale* (Federation of the Societies for Realizing the Value of the Milk of Central Switzerland). The union thus acquired 6,451 new members.

a) *Economic Measures for Meeting the Effects of the War.*

In 1916 the union took economic measures with a view to meeting the effects of the war. They were rendered necessary by the circumstances to which the war gave rise in Switzerland and they greatly preoccupied the managing committee, and more especially the Peasants' Secretariat, as well as the Office of Information as to Prices.

As regards the potato supply, the defective potato harvest was a pretext for reproaching the farmers for hoarding seed potatoes for motives of speculation. But the Peasants' Secretariat took its stand on the result of enquiries made by the Office of Information as to Prices, and was able to show that this reproach was unfounded and thus to contribute to calming public opinion. The union undertook to take an inventory of the stocks of pota-

toes, rather however out of consideration for the public than in the hope of securing new supplies for consumption. The union opposed a proposal to requisition potatoes because it was already the agriculturist's interest to sell his whole available supply and requisition might have influenced the potato crops unfavourably. The principal task of the State is to provide as ample a supply of seeds as possible and to persuade those interested to grow potatoes as extensively as possible. The importance of taking inventories of the available supply is that it prepares the way for the discharge of this task.

The union has been occupied with the reduction of the rate for the extraction of meal, the provision of home-grown cereals as fodder, the guaranteeing of a minimum price for cereals, the utilization of rye for the brewing industry, the prohibition which burdens trade in forage, the price of straw and the supply of straw to the army, the delivery of live stock for butchery to the army, the export of income producing stock and of young pigs, and questions relative to milk and dairy products. The union's action in endeavouring to obtain leave for soldiers belonging to the cheesemaking industry has not been unattended with difficulty but has been crowned with success. The union has also been occupied with the question of obtaining payments for hire for requisitioned horses, and that of suppressing such requisition and causing a return to the method of supplying horses voluntarily. Swiss agriculture is represented at the general meeting of the *Société Suisse de Surveillance Economique* (Swiss Society of Economic Superintendence), or S. S. S., by the national counsellor, M. Chuard and by Dr. Laur. These have taken advantage of opportunities for discussing the needs of agriculture, especially where the acquisition of forage is concerned. Most of the federations of agricultural syndicates have adhered to the S. S. S. This affiliation has given the agricultural syndicates of Romanic Switzerland an opportunity to group themselves unitedly, thus satisfying a long felt want. M. Chuard, member of the union's managing committee, and M. Laur, director of the Swiss Peasants' Secretariat, were the delegates of the Federal Council at the negotiations in Paris with the allied countries as to the vicuallling of Switzerland.

b) *Law as to epizooty policies, application of the law as to insurance against sickness and accidents, the customs tariff and other enterprise.*

In 1915 the proposed revision of the federal law as to the campaign against epizooty, published by the federal council in the message of 15 March 1915, was carefully examined by the union and the secretary. Their conclusions on the subject were resumed by the committee and then transmitted to the commission of the federal Chambers. These began in 1916 to discuss the proposal, and the desires of the union were partially taken into consideration and in a measure respected.

The administrative council of the *Caisse nationale suisse d'assurance en cas d'accidents* (Swiss National Fund for Insurance against Accidents) is concerned with the institution of compulsory insurance and prepara-

tions for voluntary insurance have not yet been begun. During the discussion as to insurance against accidents the union brought forward proposals as to agriculture which were accepted. It proposed finally that the foresters of communes should in particular all be insured.

As regards the revision of commercial treaties, of which one with Italy was denounced immediately before the end of the year, the Peasants' Secretariat continued to prepare for the new agreements to be made. The union also undertook much other business as to the export and import of certain merchandise and relative custom duties, the inspection of wines at the frontier, post office savings banks, the agricultural press, aliens, the federal grant for research as to the productiveness of agriculture, and the federal grants to the federation of the agricultural societies of Romanic Switzerland and in aid of vegetable gardening.

§ 2. OFFICE OF INFORMATION AS TO PRICES.

From the report which this office presented to the Swiss Peasants' Union it appears that its activity had the following forms :

- a) The collection of reports from which extracts were made ;
- b) The publication of a review of the markets ; and the supply of information as to the course of production, the position of the markets and the price of agricultural products ;
- c) The supply of information as to the international market for milk and dairy produce ;
- d) The collection of material for drawing up reports to be sent to the International Institute of Agriculture at Rome.

This office has recently assumed a growing importance which is reflected in all its branches. In 1916 it sent out 11,239 circulars and communications of which 8,725 were in German, 1,823 in French, 309 in Italian and 301 in English. The number of its correspondents has not been diminished in spite of the special circumstances due to the war and the fact that a certain number of them have been called to serve in the army. Correspondents who were obliged definitely to resign have been replaced. 7,183 were in this case.

The especial circumstances due to the war obliged the office to devote particular attention to the statistics as to Swiss crops. The office undertook the following enquiries :

- 1) An enquiry as to modifications in the area on which cereals and potatoes are grown (about 900 correspondents).
 - 2) An enquiry as to the average yield per hectare (1).
 - 3) An enquiry as to the Swiss potato harvest in 1916 (600 correspondents).
- An enquiry, pursued in 1,643 communes, as to the quantity of fruit which could be sold during the autumn of 1916.

(1) 1 hectare = 2.47 acres.

The average edition of each number of the *Revue des marchés* (Review of the Markets) is of 85,471 copies of which 74,406 are in German and 11,065 in French. In 1915 the average edition was of 79,060 copies. The review has been inserted in ten German and two French agricultural journals.

In 1916 the office had to confine itself to following the course of prices in the interior. The movement of foreign markets has been paralysed by the imposition of maximum prices, the prohibition against export, and in general by circumstances due to the war; and therefore their importance has compared with that of Swiss markets is quite secondary. Nevertheless the abundance of material obliged the editor of the *Revue des marchés* to publish three double numbers in the German edition.

The Office of Information as to Prices also sent the following notices to the journals subscribing to the *Revue des marchés*:

A communication explaining the provisions as to the price of milk and cheese;

Two communications as to the price of milk for consumption;

Two communications as to dairy production;

Eight reports on the market for fruit;

One publication as to the Swiss cereal and potato harvest;

One communication as to the placing of agricultural labour by the Swiss labour offices;

Two reports on the world's cereal harvest in 1916.

As in former years the chief conclusions derived from the statistics as to prices, which were drawn up by the office, were placed at the disposal of the Federal Statistical Office which published them in the Swiss Statistical Yearbook.

In the beginning of the year a complementary report was drawn up as to the valuation of live stock in view of the war tax, and this report was sent by the Peasants' Secretariat to the Federal Department of Finances.

The Office of Information has been occupied by preparations and deliberations with reference to the price of milk and cheese, and has forwarded a large number of pertinent requests.

During the autumn of 1915 an enquiry was undertaken in order to discover the increase in the area planted with cereals and potatoes as compared with 1914. A new enquiry in June 1916 aimed at discovering the modification of such area since 1915. The office received relevant reports from 850 correspondents in all parts of the country. As compared with 1915 the increase in the cultivated area was one of 9.7 per cent for cereals and 13.5 per cent. for potatoes. As compared with 1914 it was 20.8 per cent. for cereals and 32.2 per cent. for potatoes.

An enquiry was also begun as to the average harvest yields per hectare, to provide a basis for the annual estimates of the cereal and potato harvests made by the office. For this enquiry the office made use of former pupils of the schools of agriculture, most of whose societies have promised their co-operation.

For the first time this office made the attempt of conducting an enquiry among producers in order to discover the harvest yield calculated

on the percentage of the average and on the yield per hectare of the potato harvest in 1916. According to the data as to the percentage of the average yield the probable total yield was estimated at 5.9 million quintals (1). If however the data as to the yield per hectare be taken as basis the resultant estimate is 6.1 million quintals. The yield has therefore been estimated in round figures at 6 million quintals.

The activity of the office also included an enquiry made in autumn as to the amount of fruit available for sale. The enquiry was made by communes and the questions were sent to 1,643 communes in the fruit-growing districts of German and Romanic Switzerland. The answers received numbered, 1,494. The quantities available for sale were as follows :

Table apples	200,000	quintals
Cider apples	230,000	»
Early cider pears	44,000	»
Late cider pears	40,000	»
Prunes	2,700	»
Nuts	1,100	»

In the matter of information as to the international market for milk and dairy produce, the quarterly statements were drawn up as previously in spite of difficulties caused by the war. The following organizations lent their aid :

- 1) *Austria* : General Union of Agricultural Co-operative Societies of Austria seconded by the Imperial and Royal Society of Agriculture.
- 2) *Belgium* : International Dairy Federation.
- 3) *Canada and the United States* : Various communications.
- 4) *Denmark* : Royal Society of Agriculture of Denmark.
- 5) *France* : Various local and provincial organizations, individuals.
- 6) *Germany* : Various local and provincial organizations, individuals.
- 7) *Great Britain* : The Board of Agriculture (by sending publications), various organizations.
- 8) *Holland* : General Dairy Union of the Netherlands.
- 9) *Hungary* : Division for the Dairy Industry and Alpine Economy of the Royal Ministry of Agriculture (by sending question-forms and reports), seconded by the National Society of Agriculture of Hungary.
- 10) *Italy* : National Union of Co-operative Dairies, local associations, individuals.
- 11) *Norway* : National Committee of the International Dairy Federation.
- 12) *Sweden* : Secretariat of the Royal Academy of Agriculture.

Quarterly reports were sent as usual to correspondents at home and abroad. The average quarterly edition was of 2,525 German and 1,255 French copies, and 120 extracts in German, 50 in French, 220 in Italian and 150 in English.

(1) 1 quintal = 220 lbs.

The office sent month by month to the International Institute of Agriculture at Rome its customary reports on the condition of the principal crops, of silkworm rearing, of foreign trade in cereals, and of beetroot growing and sugar production, and on the provisional and final estimates of the cereal and potato harvests, wine production, the tobacco harvest, etc.

§ 3. OFFICE OF VALUATION.

The amount of business entrusted during 1916 to the Office of Valuation was so large that it was necessary to engage new experts.

Its activity, as determined by its rules, comprised :

a) The drawing up of reports on investigations and valuations made at the request of individuals in the case of the repurchase of inheritances, successions, acquisitions of real estate, requests for credit and applications for compensation for damage to crops. As in the previous year the largest number of applications for valuations were made by individuals.

b) Investigations and valuations for institutions of credit and the State.

c) Investigations and valuations in cases of expropriation.

d) Co-operation in legal or official valuations.

e) Contributions to scientific research in the matter of agricultural taxation.

The value of the real estate valued in 1916 was as follows :

Real estate valued according to the income it produced	3,266,000 francs
" " " " " its selling value.	1,762,000 "
" " " " " its value for the maintenance of a family	632,000 "

Recourse was also had to the Office of Valuation for information of every description. Besides its simple communications the office made real studies of the most diverse questions, among them those inherent in the law of succession among peasants, the purchase and sale of real estate, the letting of real estate, due services and the land tax.

§ 4. THE OFFICE OF INFORMATION AS TO INSURANCE AGAINST ACCIDENTS AND SICKNESS.

This office has had to supply information as to the foundation of sickness funds and in one case to pronounce on projected by-laws which had already been drawn up. The office has been asked for other information, especially on the subject of insurance against risks of civil liability.

§ 5. THE BUILDING OFFICE.

A new institution, which has certainly rendered notable service to Swiss agriculture, was formed last year, namely the Office of Rural Building.

This office, formed on the model of those existing in Germany, is occupied not only with farm buildings but also with those necessary to the cheesemaking industry. Its activity has the following forms :

- 1) It gives information by word of mouth.
- 2) It answers requests for information addressed to the State.
- 3) It communicates its observations and proposals, following on investigations made on the spot, by writing or by word of month.
- 4) It makes sketches and plans.
- 5) It supplies addresses of contractors and those furnishing supplies.
- 6) It makes specifications.
- 7) It undertakes the superintendence of building.
- 8) It verifies building accounts.

The new office was opened on 1 January 1917 and necessary rules and a scale of charges will be drawn up for it.

B. — SECRETARIAT OF SWISS PEASANTS.

§ 1. PROGRAMME OF WORK.

The programme of work laid down by the union for the Secretariat of Swiss Peasants comprised :

- 1) Preparations for the revision of commercial treaties.
- 2) The question of agricultural labour.
- 3) Researches as to the income produced by agriculture.
- 4) Researches by means of double-entry book-keeping.
- 5) Reorganization of the archives and the library.

The work concerned with preparations for the revision of the customs tariff was carried on as far as time allowed.

In the matter of rural labour the secretariat published a fourth part of its work on this subject at the end of 1916. It forms the last chapter of the proposals of the secretariat for the solution of the labour problem and treats of "the reduction of the need for agricultural labour". There has also been a particularly careful examination of the opportunities there would be for replacing manual agricultural labour by mechanical motive power and for using agricultural implements and machines which would economise labour, the estimated expense of employing motors and machines, as compared with that of human labour, being of course taken as basis.

Researches as to agricultural yield were made by means of single-entry and double-entry agricultural book-keeping. The statistics collec-

ted as a result of book-keeping increase every year in volume and value. By this means it has been possible to undertake new researches, as into modifications of wealth, the influence of grouping lands on the results of agriculture, the relations between the capital invested in real estate and the profit derived from land, etc. The secretariat presented in a very concise form its customary report on the revenue derived from Swiss agriculture in 1915. Care was taken to emphasize the effect of two years of war. In 1916 the secretariat was commissioned by the Swiss Society of the Friends of Apiculture to check and examine the book-keeping of apiculturists. The Office of Valuation of the Swiss Peasant's Union continued to draw on the results of the secretariat's researches in valuing farms. The secretariat also placed the results of its researches at the disposal of the newly founded Office of Rural Buildings. Finally the secretariat furnished much information especially on the subject of taxation for the war tax. On the occasion of the preparations for a revision of the customs tariff it undertook a special enquiry into the revenue derived from Swiss vineyards. The examination of the facts thus collected gave very interesting results, and it was therefore decided to continue these researches.

§ 2. OTHER WORK: THE WAR TAX. RELATIONS WITH
THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

We have already explained in this Review the results of the researches and proposals of the secretariat as regarded the war tax (1). In 1916 the union continued its effort in the direction of judiciously interpreting the problem of valuing live stock with a view to the war tax.

The secretariat also undertook this year to act as intermediary between the International Institute of Agriculture and Germany, Austria, Hungary, Bulgaria and Turkey.

(1) *International Review of Agricultural Economics*, June 1916, page 40.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH INDIA.

THE PROGRESS OF AGRICULTURAL CO-OPERATION IN INDIA IN 1915-1916. —

Report on the Working of the Co-operative Societies' Act in Burma for the year ended 30th June 1916 Rangoon, Government Printing, 1917; *Annual Report on the Working of Co-operative Societies in the United Provinces of Agra and Oudh for the year 1915-1916*, Allahabad, Government Press, 1916; *Report on the Working of the Co-operative Societies Act in the Madras Presidency in 1915-1916*, Madras, Government Press, 1916; *Report on the Working of the Co-operative Societies in Coorg for the year ending 30th June 1916*, Mercara, The Coorg District Press, 1916.

In our issue for April we published an article on the progress of agricultural co-operation in India in 1914-1915. We will here give some data as to the development of co-operation in certain provinces in 1915-1916.

I. BURMA.

During this year co-operation has made marked progress in Burma. After two years during which a certain repression was exercised expansion has been allowed. In the twelve months the total number of co-operative societies has increased by 50 per cent., passing from 1,490 to 2,251; while the total number of members has risen from 39,134 to 51,356, the working capital from Rs. 84.77 lakhs to 106.82 and the management and working expenses from Rs. 1.05 lakhs to Rs. 1.48. The subdivision of over-large unions has raised their number from 112 to 189 and the increase in efficiency has been proportionate.

The number of *Agricultural Credit Societies* passed from 1,252 to 1,685 and that of their members from 30,130 to 36,494. Their working capital, exclusive of advances by the State, rose from Rs. 36,47,302 to Rs. 47,04,933 and their total reserve funds from Rs. 4,39,924 to Rs. 6,34,985. The formation of the Central Reinsurance Society at Mandalay led to an increase in the number of *Cattle Insurance Societies* from 63 to 305 and a proportionate increase in their membership.

There were 46 non-agricultural societies on 30 June 1916 as against 43 on 30 June 1915. The ordinary rate of interest charged on loans by the *Central Banks* was 9 per cent.

The number of agricultural societies per 10,000 of the population was on 30 June 1916 just under three for Burma proper, but 25.15 and 8, respectively, for the Kyaukse, Shwebo and Pakòkku districts (1). These three districts, in which co-operation was strongest, had, respectively, one agricultural society for every 800, 1520 and 1570 occupied acres, excluding fallows; and Burma proper had one for each 7,100 acres (2).

Since outside money was tight as an effect of the war, members depended more than usual on their societies for credit. Crop prices were moreover generally lower than before the war. As a result the average loan to members of agricultural societies increased from Rs. 132 to Rs. 142. This considerable rise was however less than the average increase per member of owned capital in such societies during the year.

2. UNITED PROVINCES OF AGRA AND OUDH.

The following table shows the general progress of the co-operative movement in the United Provinces in 1915-1916.

Kind of Society	Number of Societies		Number of Members		Working Capital	
	1 July 1915	30 June 1916	1 July 1915	30 June 1916	1 July 1915	30 June 1916
					Rs.	Rs.
Central	58	58	8,502	5,613	61,54,725	64,39,838
Agricultural, primary . .	2,716	2,949	101,511	106,333	49,77,430	51,32,044
Non-agricultural, primary	188	182	6,270	6,918	4,58,773	4,62,969
Total . . .	2,962	3,189	116,283	118,864	1,15,90,928	1,20,34,851

The following table gives the sources of the assets of the primary societies and shows their progress. The figures refer to thousands of rupees.

	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16
Loans from central societies	14.28	21.82	31.31	40.58	38.06	37.84
" " non-members	1.97	2.41	4.44	4.45	3.10	1.95
" " government	39	24	17	13	10	6
Shares and deposits of members	3.20	4.35	5.29	7.30	9.26	11.00
Profits and reserve funds	1.78	2.07	2.90	3.96	5.44	7.06
Total . . .	21.60	30.89	44.11	56.42	55.96	57.91

(1) In 1912 this proportion was 26 for Germany, 23 for Denmark, 55 for Belgium, 9 for Italy and 8 for France.

(2) Belgium, France, Germany, Denmark and Italy had, respectively, one agricultural society for every 943, 8,226, 3,058, 5,287 and 3,964 cultivated acres.

This table shows that the accumulated savings of peasant members are beginning to assume respectable proportions.

The continuation of the war naturally had a profound effect on co-operation in these provinces. Generally speaking it took the form of vague uneasiness and a half-conscious disinclination to part with money or its equivalent, but in the latter part of the year there was a recovery in this respect and much of the equilibrium disturbed by the war was restored. The cotton crop was small owing to the low prices of the previous year and the rain and floods of September. The other crops did not enable the cultivator to recover any of the ground lost in the two previous years. When the year closed the indebtedness of members to primary societies had increased by Rs. 95,000; and the sum overdue had reached 17.70 lakhs, having increased by Rs. 70,000.

3. MADRAS.

There were 1600 co-operative societies in the Presidency on 30 June 1915 and 1800 on 30 June 1916. The number of new societies formed during the year was 263 but 63 earlier societies were cancelled.

The societies were chiefly active in the matter of affording credit. Generally speaking the work of the year was the further consolidation of the credit movement by investing societies with the right of shareholding and the function of supervision. On 30 June 1916 there were 29 administrative unions of societies — without counting Banking Unions, the Madras Provincial Co-operative Union and the South Arcot District Supervising Union — having 604 societies as their members; while 608 societies were shareholders in Central Banks.

The following table makes clear the position at this date:

Kind of Society	Number of Societies		Number of Members		Working Capital	
	1 July 1915	30 June 1916	1 July 1915	30 June 1916	1 July 1915	30 June 1916
					Rs.	Rs.
Central societies.	30	(1) 11	1,770	1,568	58,73,402	70,70,062
Agricultural societies . .	1,446	1,601	90,088	100,761	64,52,631	74,95,149
Non-agricultural societies	124	157	27,603	34,565	17,63,389	23,23,622
Total . . .	1,600	1,769	119,461	136,894	1,40,89,422	1,68,88,833

(1) Plus 31 unions, the 604 societies affiliated to which have a total capital of Rs. 34,34,593.

At the end of 1915-1916 the indebtedness of members to agricultural societies was Rs. 56,79,837 as against Rs. 50,85,356 at the close of the pre-

vious year. At the former date the sum overdue was Rs. 10,44,010, at the latter Rs. 9,45,369. Proportionately therefore there was a slight improvement.

The amount of loans granted for productive purposes was again higher than in the previous year, being 19.08 lakhs of rupees while the total loans amounted to 33.81 lakhs. The percentage of such total lent for productive purposes was thus 56.43 as against 56.88 in 1914-1915. The number of loans for terms of less than a year had diminished and that of those for terms of more than two years had increased. This is a sign that the societies begin better to understand the distinction between short and long-term loans. The earlier tendency was to look upon all credit operations as made for a year only but renewable in case of need.

4. COORG.

The number of co-operative credit societies in Coorg remained the same as in 1914-1915; but 51 new members were enrolled, the capital rose from Rs. 1,15,500 to Rs. 1,22,168 and the reserve fund from Rs. 23,514 to Rs. 28,554. No loans were taken from outsiders or government, and debentures amounting to Rs. 1,490 were redeemed.

Although the Cattle Insurance Societies are now in the fourth year of their existence the public still view them with some distrust. Briefly the position is as follows: 391 head of cattle are insured; 27 policies have been redeemed to the value of Rs. 278; the reserve fund has risen from Rs. 590 to Rs. 1,030; and the total capital is Rs. 4,590 and is invested in the co-operative credit societies at 8 per cent. interest. Some of the co-operative credit societies have recognized that the payment of dividends to their shareholders does not encourage thrift and that it would be better to use this money to pay premiums for cattle insurance. It is hoped that the new ruling to this effect will add new members to the cattle insurance societies.

GERMANY.

THE FEDERATION OF POLISH CO-OPERATIVE SOCIETIES IN THE PROVINCES OF POSNANIA AND WEST PRUSSIA IN 1914. — *Statistische Korrespondenz*, 24 December 1915, Berlin. Publication of the Royal Statistical Land Office (*Kögl. Statistisches Landesamt*) (1).

This federation represents all the Polish co-operative societies in Posnania and West Prussia. The German co-operative societies in these provinces have their own federations, while the sixteen Polish co-oper-

(1) *Statistisches über den Verband der Erwerbs- und Wirtschaftsgenossenschaften der Provinzen Posen und Westpreussen.*

ative societies of Silesia belong to no federation. This Polish federation was formed in 1871, and was registered and granted the right of revision on 14 July 1892.

At the end of 1914 it had 301 members as follows :

208	co-operative societies	of credit
61	"	" for purchase and sale
22	"	" subdivision
4	"	" consumption
3	"	" the construction of dwellings
3	"	" of trades.

1) of these 208 credit societies 199 had unlimited and only nine limited liability. The latter were formed after the law of 1889, allowing the creation of co-operative societies of such type, was in force.

The co-operative credit societies had in all 129,448 members or an average of 622 for each society. The minimum membership of a society was fifty-one, the maximum 6,554. The trades of members were as follows (1) :

85,848 (68.63 per cent.)	were agriculturists ;
24,858 (19.87 per cent.)	" artisans ;
14,391 (11.50 per cent.)	" traders and members of various trades.

In the agriculturists' group small landowners predominated being represented by 76,776 members. Of that of the artisans more than half — 14,147 — were also landowners.

It is interesting to note that almost all the societies comprised members of different trades; those which were composed of members of only one trade being very rare. This is due to the fact that most of them were situated in towns and included a town and the surrounding villages in their sphere of action.

Their working capital amounted to 320,275,969 marks, being made up as follows :

Share capital	26,280,839 marks
reserve fund	15,155,934 "
individual deposits	271,013,287 "
current accounts in banks	7,825,909 "
	<hr/>
	320,275,969 marks

(1) The data for two co-operative societies are lacking.

The working capital of individual societies varied enormously, as appears from the following figures :

1	co-operative society	had a working capital of		47,664,250	marks
12	"	" " " " " "	more than	5,000,000	"
26	"	" " " " " "	from 2 to	5,000,000	"
54	"	" " " " " "	" 1 "	2,000,000	"
50	"	" " " " " "	" 500,000 "	1,000,000	"
59	"	" " " " " "	" 100,000 "	500,000	"
7	"	" " " " " "	less than	100,000	"

The working capital of the limited liability was much larger than that of the unlimited liability societies.

The number of depositors was 234,351, most of them peasants. According to their form the deposits represented short-term liabilities, but in fact most of them were for long terms for the peasants do not withdraw their deposits except to buy land.

The total assets of the 208 co-operative credit societies amounted to 320,275,969 marks

made up as follows :

bills of exchange	. . . . .	280,126,736	"
deposits in banks	. . . . .	15,317,472	"
in hand	. . . . .	3,465,170	"
various assets	. . . . .	21,366,591	"

The Polish co-operative societies usually grant credit, even in the case of mortgage loans and even although the loans are for long terms — three to ten years — in the form of bills of exchange. The co-operative society reserves the right to exact repayment before the term expires, if the debtor do not pay his redemption quotas regularly or if his solvency diminish.

The profits realized amounted to 16,901,249 marks, 16,510,459 marks being interest exacted from debtors. The total expenditure amounted to 14,174,888 marks, 11,829,068 marks being interest paid to depositors and banks and 1,874,324 marks costs of administration. The net profits realized by 202 co-operative societies amounted to 2,988,198 marks of which the share of six societies was 261,836 marks. Of all the net profits, 1,390,149 marks were distributed among the members and the rest paid into the reserve fund.

2) The so-called "Rolnik" (agriculturists') co-operative societies for purchase and sale were first formed in 1894, but began to develop on a solid basis only in 1900.

At the end of 1914 there were in Posnania and West Prussia seventy Polish co-operative societies for purchase and sale of which sixty-one, having 9,733 members, belong to the Polish federation. All have limited liability. The shares are from 20 to 50 marks, and each of them involves lia-

bility for five times its amount so that the extent of liability incurred by a share varies from 100 to 250 marks. No member may have more than ten shares. Most of the members are agriculturists.

Data as to their working capital were furnished by only fifty-seven of these societies.

The capital held by these societies amounted to 2,025,012 marks including 934,748 marks of paid-up share capital and 1,090,264 marks of reserve fund. The liability of the members extended to 9,926,000 marks. The societies also disposed of capital belonging to outsiders formed by deposits of individuals and credit obtained from co-operative credit societies. Until 1908 private deposits provided the larger part of the working capital. In that year the general meeting passed a resolution that in future the societies should accept fewer deposits from individuals and increase the sum of the credit afforded to them by co-operative credit societies. In consequence the societies for purchase and sale, in order to obtain larger credit from the credit societies, formed with them a species of personal union, admitting to their administrative councils two or three members of the administrative council of a credit society. At the end of 1914 the societies' debt was 12,532,526 marks, one third being deposits of individuals and two thirds on current account with credit societies.

These societies for purchase and sale undertake two kinds of business: they buy for their members goods necessary to agriculture (seeds, manures, forage); and they sell agricultural produce on commission. Their business of the latter kind is the more important, the selling being also practised by the co-operative credit societies and the agricultural circles.

Their total turnover amounted to 46,000,000 marks, 28,000,000 marks standing for sales and 18,000,000 marks for purchases.

3) The co-operative societies for subdivision were first formed in 1890. Today there are altogether thirty-one of them and twenty-two belong to the Polish federation.

All the societies for subdivision have limited liability.

Shares are from 100 to 500 marks and each involves liability for from two to five times its amount. The total membership of the societies belonging to the federation was 5,070. The members are mostly agriculturists, large or small proprietors; but the so-called burgher societies include as members a certain number of traders and artisans and even some professional men.

Their capital amounted to 11,422,092 marks, made up of a share capital of 7,533,970 marks and a reserve fund of 3,888,152 marks. They also receive very large credit from the co-operative credit societies and from the Federal Bank and other Polish and German banks. The deposits of outsiders form a minimum of their working capital. Like the societies for purchase and sale they often enter into a personal union with the co-operative societies in their respective districts.

Their business is of two kinds:

1) They regulate the mortgage debts of landowners;

2) They buy large properties, divide them into small lots, and resell them to Polish settlers.

The data as to their business in 1914 have not been published.

• 4) The statistics for 1914 supply figures only as to the membership of the consumers', the trades' and the building societies. The ten co-operative societies of these three kinds comprised 5,811 members.

UNITED STATES.

THE AMERICAN SOCIETY OF EQUITY. — *The Grain Growers' Guide*, Winnipeg, 11 April 1917.

Founded in 1902 at Indianapolis, Indiana, the American Society of Equity is one of a number of kindred bodies working in the central and north-western States for better organization among farmers. From 1902 to 1911 it had tremendous ups and downs — a series of successes and failures.

Its growth has been very rapid in the last four years. The membership is now 100,000. It has 7,146 local unions and is operating in fourteen States — Kentucky, Indiana, Illinois, Wisconsin, Iowa, Minnesota, North Dakota, South Dakota, Nebraska, Wyoming, Montana, Oregon, Washington and Idaho — and has scattered members in other places.

Under the rules of this society a county union comprises five local unions and a State union a minimum of five county unions and 500 members. In Nebraska and Wyoming there are branches of the National Office which is situated at Wausaw in Wisconsin. The subscription for a new member is now \$4 a year, of which 50 cents go to the local union, 15 cents to the county union, 35 cents to the State, 50 cents to the National Office, 50 cents either to the State or to National Equity papers and \$2 to the State for organizing purposes.

So far the work of the American Society of Equity has been mainly educative and has been carried on through meetings of local unions, literature, organizers or otherwise, much as is the educative work of the Grain Growers' Associations in Western Canada. This side of the enterprise seems indeed to have overshadowed its business side, for until the last two years little was done to develop the business organization.

A little more than a year ago the central organization established the American Co-operative Association which is the business organization of the American Society of Equity. It is organized under the Wisconsin State laws. It has already established several branches and transacted a large amount of business. Its first enterprise was to publish *The Organized Farmer* of which the first issue appeared on 14 January 1915.

The large business that has developed has secured for the association the very lowest possible prices and enabled it to sell to its members approximately at the prices charged by wholesalers to retailers. The quality of the goods is guaranteed, the customer being under no obligation to accept them if the quality be not good.

A large quantity of wool is marketed through the association and it goes to the manufacturers directly. This year co-operative canneries and co-operative driers are being established in the Pacific coast States for canning and drying fruit. The stockholders of these co-operative societies are the organized farmers and 90 per cent. of them are members of the American Society of Equity. The total capitalization is \$250,000 of which \$3,000 has been paid up.

The Wisconsin State Union of the American Society of Equity has about 400 local unions and carries on varied work. It buys supplies, and was able last year to secure a profit in spite of the narrow margin on which business is conducted. Coal, flour, fodder, twine, machinery and all kinds of groceries are handled in fifty-pound orders. The price of gluten fodder has thus been reduced to members of the union by nearly \$9 a ton. The Wisconsin State Union publishes its own paper, *The Equity News*.

At present the association is organizing the Industrial Co-operative Union which will, as far as possible, deliver goods directly from the producer to the consumer. A company with a capitalization of half a million is being started, half the stock to be sold to producers and half to consumers in Milwaukee. One or two central receiving plants are being established and a number of distributing centres with rigs are being placed in different parts of the city. A consequent reduction in the cost of living is anticipated.

The activities of the society of Equity vary in different States. In Minnesota and Wisconsin the live stock shipping associations have had a great development, at least 200 of them being organized by this society alone. At Farmington in Minnesota a wool warehouse has been established; and not only is a better price being secured for wool, but many excellent garments are being manufactured very cheaply and returned to the wool consigners at far lower prices than those for which they could buy them elsewhere. In North Dakota the chief business has been in grain, and a fight steadily waged for some time with the Minneapolis Chamber of commerce has finally resulted in the establishment of a separate exchange in St. Paul. Other States have dealt with special phases of the marketing and buying problem.

NOTICES RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

GREECE.

KALITSUNAKIS (Dr. Jur. D. E.): *Die genossenschaftliche Bewegung in Griechenland* (The Co-operative Movement in Greece). *Balkan-Revue*, No. 4-5, Year III, 1916.

In 1911 a new department, called the Ministry of National Economy, was created in Greece, and the State has since intervened more importantly than before in the country's economic life. In 1914 this department proposed a law as to co-operative societies which has had force since 24 January 1915 and on which the article here cited bears.

In drawing up the law the Greek legislature was influenced by the character of the co-operative movement in Germany, and therefore the measure presents a combination of Raiffeisen and Schulze-Delitsch principles and reproduces almost literally many provisions of the German law of 1889 on co-operative purchase and labour (*Erwerbs- und Wirtschafts genossenschaften*). But to some extent the Greek legislature took into account the special circumstances of the country, and thus there are in the law certain deviations from the line traced by German principles.

The following are the characteristic features of the Greek law :

1) In the case of co-operative societies of every kind, whether credit, agricultural, industrial or other, the law allows their formation on the principle of either limited or unlimited liability. The form selected has merely to be noted in the by-laws (article 22). As is known the rural co-operative societies, especially those which are credit societies, almost all have unlimited liability.

2) In the matter of the territorial sphere of an association the Greek law adopts the principles of Raiffeisen, in that of the admission of members those of Schulze-Delitsch : thus the sphere of co-operative action is limited to a village or a commune, and the admission of members depends on the obligatory purchase of shares. The members of an unlimited liability society are obliged to pay the amount of one share, but the by-laws of a limited liability society may prescribe the subscription of two or even more shares (article 20).

3) Articles 14 to 67 and 68 of the law prescribe the obligatory formation of a reserve fund in accordance with Raiffeisen principles. Ten per cent. of the net profits are paid into the reserve fund annually, and such payments cannot be interrupted until this fund becomes equal to the share capital. The reserve fund serves to cover eventual losses and may not be used as working capital. It is invested in State securities. It is considered

to belong to the co-operative society in its capacity as a legal person and not to be the collective property of the members ; and therefore in case of liquidation it is not distributed to the members but is deposited in the Central Fund which remits it to any new co-operative society formed in the same place and with the same objects.

Besides this regular reserve fund the law allows the creation of extraordinary reserve funds, which have however a quite different character being employable as working capital. They may be distributed among the members if the general meeting so decide.

4) The organs of a co-operative society are the council of administration, the council of vigilance and the general meeting. The functions of the two former are honorary, only their technical officials being paid. In the general meeting of an unlimited liability society all the members have equal rights ; in that of a limited liability society the members are divided into two classes, those having one and those having two votes.

5) Articles 55 and 56 provide for the liquidation of societies. Liquidation takes place :

- a) in response to a resolution passed by the general meeting ;
- b) when a judgement on a legal point has to be executed ;
- c) in case of failure.

When a liquidation is necessary liquidators are elected who are responsible for the conduct of the society's business until the liquidation has been effected.

The law provides finally that wherever a case is not covered by its dispositions those of the codes of commerce and civil procedure shall be followed.

Up to 31 December 1915 eighty-seven co-operative societies were created under the provisions of this law, namely sixty-one rural credit societies, eighteen rural producers' societies which included eleven for the production of dried currants, and eight rural and urban labour societies.

Of these eighty-seven societies only six had unlimited while eighty-one had limited liability.

UNITED STATES.

1. BEXELL, (J. A.) and KERR (W. H.): BUSINESS PRACTICE AND ACCOUNTS FOR COOPERATIVE STORES. *U. S. Dept. Agr. Bull.* 381 (1916), pp. 56, pl. 1.

The authors have outlined a simple and adequate system of records for co-operative retail stores and pointed out fundamental business methods that must be observed to insure success. They have discussed this subject under the headings of corporate records, statements and reports, operating records, auditing, and office equipment. The bulletin outlines in detail the necessary records and statements essential to the proper conducting of stores under a co-operative scheme and gives a large number of model forms.

* * *

2. HUMPHRY (J. R.) and KERR (W. H.): A SYSTEM OF ACCOUNTS FOR LIVE-STOCK SHIPPING ASSOCIATIONS. (*U. S. Dept. Agr. Bull.* 403 (1916), pp. 14).

In this bulletin types of shipping agencies and methods of financing shipping associations are described, together with methods of keeping the accounts of such associations. The authors have outlined a system in which the only books of record required are a cash journal, consisting of a multi-column cash book and a journal combined, with provision for a detailed account of sales of supplies, and an ordinary form of loose-leaf ledger. They also describe other forms that may be used, such as the shipping record envelopes, members' receipts, members' account sales, manifests, sales tickets, and cash receipts. Sample forms are included in the bulletin.

* * *

3. BEXELL (J. A.), MACPHERSON (H.) and KERR (W. H.): A SURVEY OF TYPICAL CO-OPERATIVE STORES IN THE UNITED STATES. (*U. S. Dept. Agr. Bul.* 394 (1916), pp. 32, pls. 2).

Data collected from sixty stores in ten States by the Office of Markets and Rural Organization in co-operation with the Oregon Agricultural College are reported and discussed.

"The figures collected in this survey bring out the conclusion that the majority of the co-operative stores established are unsuccessful in achieving their main object — saving on purchases to members and a reduction of the high cost of living. This conclusion is borne out by the supplementary notes collected from managers who could not apply statistics, and by notes on interviews with leaders who are acquainted with the store movement in whole sections which could not be covered in detail. But that there is one real service which the co-operative stores have performed seems to have been demonstrated again and again. Even in cases where stores have failed absolutely and gone into bankruptcy they have frequently been responsible for the introduction of improved business methods in the towns where they were established. They have had the effect of stimulating competition. In cases where the merchants have competed keenly against the co-operative store they have been compelled to adopt more efficient business methods. This has resulted in lower prices to every consumer in the locality and frequently in better prices to farmers on produce".

The authors believe that the conditions necessary for success are good leadership, capable management, favourable environment, and adequate legal safeguards, and that a lack of these is generally the cause of failure. A number of statistical tables, setting forth the various facts concerning the stores from which this survey was made, are included in the bulletin.

* * *

4. GALPIN (C. J.) and SAWTELLE (D. W.): RURAL CLUBS IN WISCONSIN (*Wisconsin Sta. Bul.* 271 (1916) pp. 58, figs. 22).

The authors believe that to live on good terms with others is a part of modern farming, as truly as to know how to farm, and that the higher level of efficiency is reached in the science and art of local agriculture when families know one another well and meet frequently. A strong circulation of ideas and impulses is deemed necessary to counteract discontent and the temptation to sell farms and move away from rural districts.

The authors state that about one fifth of the farmers in Wisconsin are members of various rural clubs or attend their meetings. They have divided the rural clubs into four typical groups each of which they illustrate by typical examples. The four groups are those of the farmers' family club, the farm men's club, the farm women's club, and the young folks' club.

Part II: Insurance and Thrift

UNITED STATES

THE GENERAL CONDITIONS OF INSURANCE AGAINST FIRE AND THE DEVELOPMENT OF MUTUAL INSURANCE.

OFFICIAL SOURCES:

VALGREN (V. N.), Investigator in Agricultural Insurance Office of Markets and Rural Organization: — Farmers' Mutual Fire Insurance. Washington, Government Printing Office, 1917.

POTTS (Rufus M.): Forty-Seventh Annual Insurance Report of the Insurance Superintendent of the State of Illinois. Farm Mutual Insurance Companies.

OTHER SOURCES:

WENTWORTH (Franklin H.), Secretary-Treasurer National Fire Protection Association: American Fire Waste and its Prevention, in *The Annals of the American Academy of Political and Social Science*, Vol. LXX, No. 159, March 1917, Concord, New Hampshire.

RIEGEL (Robert), Instructor in Insurance, Wharton School of Finance and Commerce, University of Pennsylvania: Rate-making Organizations in Fire Insurance. Ibid:

RIEGEL (Robert): Problems of Fire Insurance Rate-making. Ibid:

BLANCHARD (Ralph H.), Instructor in Insurance, Wharton School of Finance and Commerce, University of Pennsylvania: Insurance of the Catastrophe Hazard. Ibid:

§ I. SOME ASPECTS OF INSURANCE AGAINST FIRE IN THE UNITED STATES.

Statistics show that in the United States and Canada the fire waste is roughly ten times as much per person as in Europe. This contrast is partly explained by the facts that there are more people in Europe upon whom to calculate this percentage and that more buildings in America are made of wood. The annual American fire waste averages \$3 a dollar a head of the population, and the United States government in its reports adds to this the cost of maintaining fire departments which is as much more. The total loss by fire in the United States and Canada for the last ten years has averaged \$230,000,000 a year.

a) *Fire Insurance and State Control.*

The problem of the organ which shall fix insurance rates has found in the United States two opposite and irreconcilable solutions: one presupposes that competition secures the most equitable tariff, the other that it is reached by an agreement among companies.

In New York city a rate agreement was made in 1821, but by 1825 new companies had so increased competition that it was abandoned. In 1826 an association was formed for similar purposes but it had ceased to exist in 1843. In 1866 an effort of far greater scope brought about the formation of the National Board of Fire Underwriters, composed of seventy-five companies whose common purpose was to "establish and maintain as far as practicable a system of uniform rates of premium". A rating bureau was organized by the National Board, and the United States divided it into six territorial departments for the purpose of rate-making. In 1868 thirty-seven leading companies entered into the "Chicago Compact", pledging themselves to remove any local agent upon his second conviction for violating National Board rates. But it was officially although reluctantly acknowledged that there was no general adherence to rates and they were suspended. In 1877 the rate-making function of the board was abandoned in favour of local and sectional boards of fire underwriters, which have continued to be important factors until the present time. Practically the whole country is now organized by a group of associations and bureaus. The objects of these associations are: 1) to provide a common organization which efficiently performs for all companies work each of them once performed individually, and thus economizes labour and expense; 2) to establish uniform rates of commission to brokers and agents; 3) to form a protective alliance against sudden changes in the insurance law of States; 4) to standardize rates and rating systems, preventing discrimination between localities, classes of risks, kinds of policies and persons.

There was a certain public suspicion of these underwriters' associations on the ground that they constituted trusts detrimental to the general interest. Hence arose the *anti-trust statutes* and *anti-compact laws* in many States which are inspired by the principle that insurance rates should be fixed by competition.

The universal effect of periods of open competition, wherever and whenever they have occurred, has been a cutting of rates to a point below the actual cost of the indemnity. Unrestrained competition leads ultimately to monopoly through the elimination of the weak or unfortunate and the survival of a few large and strong companies. Since it allows two different companies to quote different rates on the same risk laws have been passed requiring corporations doing business in a State to file a schedule of rates with a State authority and requiring that there be uniform premiums for all risks written under the same schedule. Such a law was passed in Arkansas in 1913. A second type of law required the filing of rates with the superintendent of insurance and invested him with power to order excessive, unreasonable or inadequate rates to be changed. Such a law was passed in

Kansas in 1909. Legislation of a more radical type, exemplified by the law passed in Texas in 1910, created State commissions having power actually to fix in the first instance the rates to be charged by companies. A similar Act passed in Kentucky in 1912 caused considerable difficulty, forty-seven companies having actually left the State in consequence of it in March 1914.

The following benefits are claimed to be derived from a State rating law :

1. The elimination of discrimination favouring the large insurer and favouring certain localities and classes of risks.

2. A reduction of insurance rates :

- a) by improvements in cities causing reductions in their key rates ;

- b) by improvements in individual risks ;

- c) by the removal of unnecessary and the reduction of necessary hazards,

- d) by the elimination of faults of management ;

- e) by preventing insurance companies from advancing rates when temporary conditions and bad losses in certain localities make them wish to do so.

3. Stability of rates and schedules and accessibility of information regarding the process of ratemaking.

The principal advantages of the State rating Acts were that they fully admitted the necessity of having but one rate for each risk, thereby endeavouring to secure the same result as the associations of underwriters.

In 1911 the State of New York passed a law under which the companies were allowed still to fix rates by agreement, under the regulation of the State. In 1913 North Carolina and West Virginia passed similar laws. Finally a committee of the National Convention of Insurance Commissioners in April 1915 submitted for adoption throughout the United States four model Acts, as follows :

1. An Act like the New York law already described, providing for the supervision and examination of rating bureaus ;

2. An Act prohibiting discrimination in rates and any stipulation that the whole or part of a risk be placed with certain companies ;

3. An Act requiring companies to maintain and co-operate with a public rating bureau, sharing its expenses equitably and having an equal voice as to its actions.

4. An Act requiring a written survey of each risk specifically rated by schedule.

A report to the National Convention in April 1915 indicated that the first of these laws was in existence before 1915 in six States and was enacted in three additional States by April 1915. Laws forbidding discrimination were in force before 1915 in ten States and three additional Acts of this nature were passed by April 1915. Act 3 had been passed in two States by April 1915. Massachusetts and North Carolina laws provide for a general review of all rates but only give power to make recommendations. Kansas, Kentucky and Minnesota have laws authorizing the insurance companies to review rates made by companies and order the proper rates to be substi-

tuted for them. Missouri authorizes the insurance superintendent to order rate reductions which will insure only a reasonable profit to the companies. Oklahoma delegates similar power to an insurance board. New Hampshire has long had a law enabling the insurance commissioner to review and fix rates. The following States and territories have no legislation of the types considered : Alaska, California, Canal Zone, Colorado, Connecticut, Delaware, District of Columbia, Florida, Hawaii, Illinois, Indiana, Maine, Maryland, Nevada, New Mexico, North Dakota, Ohio, Philippines, Porto Rico, Rhode Island, Utah, Vermont, Virginia, Wyoming.

The tendency during the past two years has been unmistakably towards a type of legislation which recognizes the difficulties of State rate-making and, on the other hand, appreciates the right of the public to be protected from arbitrary action and unnecessary inequity. The advantages of a statute combining the principles of private co-operation and public regulation may be shown by the results of the law passed in New York in 1911, after a very thorough investigation of fire insurance conditions, whereby this State became the leader in this kind of fire insurance legislation. Four rate-making associations now operate in New York State and have done so for some time. One of the results of delegating the power of supervision to the superintendent of insurance was to bring about co-operation and harmony of action among these associations. The first initiative came from the State but the associations brought about many reforms on their own initiative. Uniform rules, practices and forms were adopted and promulgated. Non-uniformity of rates disappeared with diversity of rules. A science of fire rating was developed, one of its most important phases being the supersession of "judgement rating" by "schedule rating". Dwelling and farm schedules have been devised with the resultant advantages of schedule rating, especially the possibility of detecting and avoiding discrimination. To some degree also the law has satisfied the nearly universal desire for lower rates. During the first few years the orders to remove unfair discriminations resulted in a saving in premiums estimated at \$1,000,000 a year.

b) Methods of Determining Rates.

Risks to be covered by fire insurance were first rated by means of a classification of buildings — for some time the only property insured — into groups, each risk included in a group taking its rate. With an increased appreciation of the multitude of differences in the construction, use and situation of buildings and the nature and quality of substances, the classifications necessarily multiplied. It became impossible to obtain enough like risks to form a valid class; there was the difficulty of classifying a building having diverse occupancies and congregated risks; an ever-growing "miscellaneous" group of heterogeneous and unrelated risks developed. The only groups which could be successfully rated were churches and dwelling-houses as to which there is a sufficient collection of data.

From 1868 onwards the schedule system was substituted in the United States for that of classification. This system attempts an analysis of fire

hazard into its component parts. The schedule gives a list of the conditions for which an inspector should look, diminishing the probability that he will overlook defects or good points. A combination of judgements was obtained in determining the charges to be made for the particular risks distinguished by the analysis. It might at least be expected that a smaller percentage of error would be present under such conditions than in the unaided estimate of any individual inspector.

The modern era of schedule rating may be said to begin with the publication in 1893 of the *Universal Mercantile Schedule*, an attempt to devise a system of rating universally applicable and to render special schedules unnecessary. This schedule starts from a basis rate for a "standard" building in a "standard" city, such rate being 25 cents for every \$100 of insurance. To decide what the rate should be on a standard building in a given city this city is compared with the standard city. In order to find the rate for a given building its construction, occupancy and exposure must also be considered. The second important universal schedule, the *Analytic*, presented a better formulated analysis of hazard. But both these schedules made practically no attempt to justify their results by statistics. An insistent demand at the Annual Convention of Insurance Commissioners that such neglect should be remedied resulted in the establishment by the National Board of Fire Underwriters of an actuarial bureau to ascertain fire loss costs. Subsequently two new schedules were devised, one combining some features of the Universal and the Analytic, the other designed to make use of the data collected by the foresaid actuarial bureau. The former, the *L. & L. Schedule*, or Larter and Lemmon Rating System, has in particular two new features: it lays stress on the "burning degree" or degree of inflammability and on the influence of floor resistance. The *E. G. R. Schedule*, or Experience Grading and Rating Schedule, is an attempt to devise a method of ascertaining the total cost of insuring risks of varying character by an analysis of statistics of past experience. The method of procedure is: 1) to ascertain the ratio of losses, expenses and a fair profit, to the insurance written on all risks in the United States; 2) to obtain a similar ratio for the average risk in each particular State; 3) to ascertain the average United States' rate on a risk of a specific class. The danger of inadequate data as a basis for premiums is thus immensely reduced, while the risks in every State are rated in accordance with its particular experience. The E. G. R. schedule is plainly an endeavour, however successful or unsuccessful its results may be, to meet fairly the objections of critics to existing methods of measuring hazard.

A few words may be said as to the collection of the data necessary to its application. On 1 January 1915 a standard classification was adopted and the actuarial bureau of the National Board of Fire Underwriters began a collection of experience from almost 190 companies, nearly one third of which were mutual societies and not members of the National Board. The board's work has been much furthered by the co-operation of the insurance departments of a number of States. In May 1916, 236 companies were co-operating in the work, including 125 National Board companies,

52 mutual companies, and 59 other companies. In 1915 about 650,000 loss reports were received and at the present rate there will be on file at the end of 1916 over a million reports of losses sustained and paid by members of the bureau.

§ 2. FARMERS' MUTUAL FIRE INSURANCE.

One of the most successful forms of rural co-operation in the United States is that of farmers' mutual fire insurance. Up to the present time however it has received but little general publicity. Few men, even among the farmers themselves, are aware of its importance. Many will be surprised therefore to learn that there are at present nearly 2,000 farmers' mutual fire insurance companies in the United States. These companies carry a total amount of insurance exceeding \$ 5,250,000,000. The property on which this insurance is written is valued at more than \$ 6,700,000,000 which is more than two fifths of the value of the insurable property in the forty-eight States.

While mutual fire insurance in the United States dates from 1752, the first farmers' mutual fire insurance company came into existence about 1825. New England and the Middle Atlantic States saw the first attempts at this form of co-operation by farmers. It was soon shown that a considerable saving in the cost of fire insurance could be effected by its means and the movement spread fairly rapidly from one community to another. By the middle of the century a considerable number of farmers' companies of this kind were in existence, and more than half those now existing were organized before 1850.

Most of these companies were incorporated under special charters and left to do business practically without guidance or supervision. Unfortunately these co-called "farmers' mutuals" in some instances failed to limit themselves to the segregated risks of moderate value to which their volume of business and their methods adapted them. Hence their record in this period is by no means one of uniform success. In spite of this handicap the movement continued to extend westwards and southwards from the place of its origin. By 1875 there were about 400 farmers' mutuals and by 1900 there were at least 1700 of them. Their present number exceeds 1950.

a) Legislation.

The rapid extension of insurance on this plan after 1850 was due in no small measure to favourable legislation. The first farmers' mutual insurance law was passed by the State of New York in 1857. This law provided that twenty-five or more persons residing in any township of the State and owning a total of \$ 50,000 worth of property which they desired to insure might form themselves into a mutual insurance company. They were allowed to insure only buildings and the goods contained therein. They could insure no city or village property and could not accept risks outside the

borders of the home township. They could write insurance against loss or damage by fire only. This law, though evidently too restrictive in its provisions regarding business territory and the risks that might be assumed, appears to have become the model for similar laws in the north central States generally, and for some twelve other States situated further south or west.

The early New York law was repealed in 1862 and it was not until 1879 that a second law, somewhat more liberal in its provisions, was enacted. In the meantime Wisconsin, Illinois, Michigan, Iowa, Minnesota, Ohio and Indiana had enacted farmers' mutual fire insurance laws. These laws and also the second New York law generally permitted^a that a number of contiguous townships or an entire county should form a business territory. All kinds of farm property might be insured and the lightning hazard as well as that of fire might be assumed. Except the Indiana law they differed from the New York law of 1879 in that they placed the companies thus organized under the supervision of the respective State insurance departments. This step was not taken by New York until 1909. By 1890 practically every State in the Middle West and several of those in the South had a farmers' mutual fire insurance law.

The present laws upon this subject, while similar in many respects, are by no means equally complete or practical in all their provisions. It may be said that at present twenty-five States have fairly satisfactory farmers' mutual fire insurance laws. Several other States have scattered provisions in their laws as to fire insurance in general which apply particularly to farmers' mutual companies. In a few States, having laws which make no special reference to farmers' insurance organizations, the companies operate either under special charters or under laws applying to all classes of mutual fire insurance companies. In six States, all in the South or South-West, no record of companies of this kind has been found.

The older farmers' mutual insurance laws have in practically every instance been variously amended. The trend of these amendments has been to enlarge the business territory permitted and give more scope to the activities of the companies. In several instances they are allowed to operate in an entire State. As a rule however the laws prescribe for them territories varying from one to five counties. While many of the companies have availed themselves of the provisions allowing such enlargement, the great majority still operate in a single country while a few still confine themselves to a single township.

There has been a growing tendency, especially in the Southern States, to allow the farmers' mutual societies to include windstorm among the hazards they assume. Mr. V. N. Valgren states in the paper cited at the beginning of this article that the practice is not to be recommended. "Each group of farm buildings, and to a considerable extent each building within the group, is a distinct and separate risk with respect to the fire and lightning hazards, but this is not true with respect to the windstorm hazard... The practice which is rapidly gaining favour in the Middle West of operating a State-wide windstorm insurance company through the co-operative efforts

of the local fire insurance companies would add much to the stability and safety of the farmers' mutual organizations in any State where combined protection is now offered by the local mutuals."

b) Importance

The total amount of insurance carried by the 1,947 farmers' mutual fire insurance companies in existence on 1 January 1915, the latest date for which relatively complete statistics are at hand, was approximately \$5,264,119,000. The total amount paid for losses during 1914 was \$10,766,651 and the expenses of operation were \$3,138,649, making the total cost of this insurance \$13,905,300. From these figures it may be seen that the average cost per \$ 100 of insurance in all these companies was about 26 cents.

The farmers' mutual companies almost without exception limit the amount of the insurance written to either three fourths or two thirds of the actual value of the property. A reasonable allowance for this fact shows the total value of the farm property insured by these companies to be approximately \$6,736,000,000. The total value of all insurable farm property in the forty-eight States on 1 January 1915 was, as nearly as can be estimated, \$15,886,000,000. This would indicate that nearly 42 $\frac{1}{2}$ per cent. of all insurable farm property in the forty-eight States of the Union was insured in the farmers' mutual fire insurance companies.

The following table shows the geographical distribution of these companies, the total amount of their insurance in force on 1 January 1915, and the average cost of \$100 of insurance during 1914 :

Geographical Division	Number of Mutual Companies on 1 January 1915	Insured value on 1 January 1915	Average cost of \$ 100 of insurance in 1914
		\$	cents.
New England	309	1,085,240,088	32
Middle Atlantic	86	149,861,450	38
East North Central	746	1,993,965,389	24
West North Central	571	1,604,003,112	22
South Atlantic	94	226,750,703	35
East South Central	48	50,732,189	44
West South Central	37	29,564,039	39
Mountain	23	13,469,764	28
Pacific	33	110,532,259	33
Total . . .	1,947	5,264,118,993	(average) 26

Thus the average cost of insurance varies from 22 to 44 cents for \$ 100 in the different divisions. For each State in which the total insurance amounted to \$ 1,000,000 or more the average cost per \$ 100 of the insurance

in 1914 varied from 70 cents (Georgia) to 12 cents (Utah). The fact that, especially in the Southern States, some of these average costs are for insurance against windstorms as well as against fire and lightning should be remembered. About 15 per cent. of all the farmers' mutual companies in the country write policies giving the combined protection. This fact makes the average of 26 cents per \$100 for the country as a whole all the more remarkable when compared with the rates which farmers without mutual organizations are obliged to pay.

c) The Advantages and the Scope of Farmers' Mutual Fire Insurance.

The total annual saving to farmers by reason of the relatively low insurance cost in their mutual companies amounts to a very considerable sum. No close estimate of this saving has been attempted, since no special effort has been made to collect lists of commercial rates for farm risks in the different States and in the various sections of these States.

It may be safely said however that in a number of the States where farmers' mutual insurance is most highly developed, the average cost of insurance for all these companies in the State has fallen well below one half of the rates quoted by commercial businesses or the so-called bureau rates.

The saving of the farmers' mutual companies in insurance cost may be credited mainly to two sources. First the necessary working expenses of large commercial companies for commissions, salaries, dividends, taxes, rents, rating charges, legal assistance, etc. have been either greatly reduced or entirely eliminated. Secondly the losses experienced have been fewer because the moral hazard has been practically removed by precautions against over-insurance on the part of the farmers' companies, and the different attitude of the insured towards a company consisting of friends and neighbours than towards a large business company having, perhaps, its premises in a distant town.

The full possibilities of direct and conscious co-operation in farmers' mutual fire insurance have not yet been realized. At least one group of mutual companies in the United States has far outstripped the farmers in effectively co-operating for the prevention of losses. This group is known as the factory mutuals and consists of nineteen companies, mainly in New England. They insure only large factories and have so far limited themselves to the district east of the Mississippi River. Not only have they secured severally the effective co-operation of their members for the prevention of losses but they have freely and generously co-operated with each other. They have for years maintained a joint bureau in Boston for the advancement of the science of safe construction and the frequent and thorough inspection of their risks. The oldest of these companies was organized in 1835. During the first ten years of its existence its average cost for \$100 of insurance was 84 cents. This average for the last ten years has fallen below 6 cents, which means that the cost of insurance in this company has been reduced to approximately 7 per cent. of what it was three quarters of a century ago.

It is believed that what has been done by the factory mutuals can be

accomplished, at least in some measure, by other classes of mutual companies. The possibilities of further reducing the cost of insurance by the application to losses by fire of what is called "the principle of stoppage at the source" are believed to be great.

A group of New England companies have reduced their losses on country risks materially in the last few years by means of a system of inspection. Companies and groups of companies elsewhere have recently begun enterprises of this kind. All risks should be thoroughly inspected at least every second or third year by a well qualified representative of the insuring company, and its members duly warned against any dangerous conditions or practices discovered. If necessary continuance in the company should be made conditional on the removal of needless sources of danger of fire.

The safe construction of farm buildings and their maintenance in a safe condition should be encouraged by a reasonable classification of risks, worked out with special reference to particular localities. It is hardly fair to charge a man who builds carefully and guards his property against dangerous conditions the rate paid by one who builds carelessly and gives little heed to the subsequent safety of his property. Moreover unless the better risks are thus recognized there is danger that in spite of the lower average cost the best risks within the sphere of a local mutual company may be picked up by larger insurance businesses which do not classify.

Reasonable efforts should be made by every farmers' mutual company to spread information among its members not only as to safe building and the upkeep of property but also as to devices for checking any fire which may occur. The causes of fires should be more thoroughly studied and more carefully tabulated, and the reports on losses, which every member of a company should see, should group them in accordance with their causes. By such concrete examples members are best warned against such dangers as those inherent in defective flues, dilapidated and weather-beaten shingle roofs, the want of protection against lightning for buildings and fences, accumulated soot in chimneys, the careless disposal of ashes, accumulated rubbish in garrets or elsewhere, the use of the so-called parlour match and the careless use of kerosene, gasoline and other inflammable substances.

All that has been said is borne out by the reports presented at Springfield on 26 and 27 January 1915 to the eighteenth biennial meeting of the Illinois Association of Mutual Fire and Windstorm Insurance Companies, and the discussions at this meeting. The data taken from these reports show at the same time the progress made by the movement for mutual insurance among the farmers of Illinois, and the weak points of the organization of insurance in this State and to some extent in the whole of the United States.

§ 3. FARMERS' MUTUAL INSURANCE AGAINST FIRE IN ILLINOIS.

The Insurance Superintendent of the State of Illinois reported on 1 May 1915 that there were 232 mutual fire and windstorm insurance companies

in Illinois on 31 December 1914, having a total membership of about 175,000 and distributed as follows :

District Mutual Fire Insurance Companies	12
County " " " "	66
Township " " " "	142
District " Windstorm " "	8
County " " " "	4
Total	232

It is seen that the companies are divided into the three classes of district, county and township companies. District companies are those whose territories are not limited by their charters to a certain county or a number of political or congressional townships. County companies were formerly those whose territory was limited to a single county but by an Act which came into force on 1 July 1909 they were allowed to include contiguous territory. The territory of township companies is limited by their charters to a certain number of political or congressional townships not exceeding twenty-five.

The following table summarizes the activity of the mutual fire insurance companies in 1913 and 1914 :

	1913	1914
Number of companies	220	220
Risks written during the year	\$ 72,382,676	\$ 69,224,486
Assessments collected during the year	678,171	507,347
Total income from all sources	775,857	723,700
Losses paid	560,598	544,184
All other expenditure	197,826	189,802
Total expenditure	758,424	735,046
Cash assets	454,409	428,682
Liabilities	86,730	113,903
Risks in force at end of year	301,068,365	315,549,673
Assessment rate on each \$100 at risk	0.22	0.19
Losses paid on each \$100 at risk	0.18	0.22
Number of risks written	37,633	35,267
Number of risks in force on 31 December	164,606	163,248

The following figures show the progress made between 1904 and 1914.

Date	1 January 1904	1 January 1914
Number of companies	211	220
Number of risks in force	129,968	164,606
Amount of insurance	\$ 175,000,589	\$ 301,068,365
Average amount of risks	1,354	1,829
Losses paid	253,165	560,598

The total amount paid in indemnities in these ten years was \$ 3,878,154, giving a total yearly average of \$ 387,115 and a yearly average for \$ 100 of insurance of \$ 0.162.

The following table throws some light on the average rate of insurance in the same decade :

Year	Millions of dollars at risk	Losses in thousands of dollars	Losses & expenses in thousands of dollars	Cost per thousand dollars for losses	Cost per thousand dollars for losses & expenses
				Dollars	Dollars
1904	185	284	418	1.53	2.20
1905	198	337	490	1.70	2.47
1906	197	301	430	1.53	2.17
1907	223	322	445	1.44	2.00
1908	239	367	505	1.53	2.11
1909	251	375	543	1.49	2.16
1910	266	452	632	1.69	2.40
1911	271	538	728	1.95	2.80
1912	281	423	596	1.50	2.12
1913	301	560	775	1.90	2.58
Average Cost				1.66	2.27
Cost for first five years, per year				1.55	2.19
» » second » » »				1.72	2.41

These figures show an irregular but gradual increase in the loss per thousand column, the cost for the second being greater than that for the first five years. The circumstance seems to be due to the considerable proportion of so-called "mysterious fires", many of which could be avoided by

precautions and inspection. One mutual fire insurance company in Illinois classified the causes of the fires for which it paid indemnities as follows :

Railway engine	1	Bonfires	3
Furnace	1	Children playing with matches	5
Spontaneous combustion	1	Sparks on roof	12
Deliberate incendiarism	2	Kerosene and gasoline	12
Farm engine	2	Defective flues	23
Smoking	2	Unknown	24
Tramps	2	Lightning	100
Parlour match	3		

Thus in this particular case 16 per cent. of the fires had unknown causes. The necessity of ascertaining the causes of fires in order to take the needed preventive measures is evident.

The government of Illinois has not neglected fire prevention but formed in 1911 the Fire Marshal's Department which is divided into three sections. The section of publicity and education conducts public meetings at which the question of fire prevention is discussed and the people instructed as to their personal responsibility. The section of investigation investigates the causes of fires which appear suspicious in order that prosecutions for fraud and arson may be conducted. The section of inspection educates the people to protect their property. In June 1914 more fires caused by lightning were reported to the department than ever before in one month, namely 120 fires which caused a total loss of \$ 202,637. In the same month the total number of fires reported was 975 and they caused a total loss of \$ 957,014. Thus lightning was responsible for 12 per cent. of the fires and 21 per cent. of the loss. The great majority of the fires occurred in rural districts and the bulk of the losses was borne by the farmers.

The co-operation of the mutual companies would be most valuable, and since the interests of farmers are directly at stake it may be hoped that the campaign undertaken in its favour will meet with good results.

The experience of commercial companies has convinced the farmers' mutual fire insurance companies of the need for a standard fire insurance policy. Mr. E. W. Monnier spoke at the meeting on this subject as follows : " We have in the State of Illinois 220 mutual fire insurance companies and 12 mutual windstorm companies and perhaps as many forms of policy and different by-laws. That such conditions exist and that mutual insurance companies are successful under such conditions can only be accounted for from the fact that mutual insurance conducted under most any condition cannot fail to save money when we compare the actual rate of loss in the State with the rate charged by old line companies, the actual rate charged by old line companies being almost or quite double the actual cost of insurance. Conservatively speaking 40 per cent. is saved by the members of mutual companies as compared with the cost of purchasing old line insurance. Can we not do even better than this? To me it seems an easy matter to increase the saving from 40 per cent. to at least 60 per cent. but I do not

believe the result will be attained unless it be by co-operation and to attain this a standard policy should be adopted by all mutual fire and windstorm insurance companies... Comparatively few mutual companies classify risks... I have encouraged for several years a lower rate of premium — but without success as yet — in the company that I represent on property that is properly protected by lightning rods... ”

The diversity which obtains in policies was illustrated during a discussion on the insurance of town property by farmers' companies. The old prejudice against insuring town and village property on the same plane as farm property is fast disappearing. In towns there are better and more quickly attainable facilities for fighting fires. Detached town dwellings are liable to be less heavily insured than improved and completely stocked farms. Such a farm is so valuable that insurance on it is easily written above the legal limit. That town property is not so readily destroyed as farm property is proved by the fact that some old line companies charge the higher rate for farm property.

The mutual companies follow individual principles in the matter. One insures town buildings which are separated from others by as much as eighty feet. In the five years ending 31 December 1914 its losses on town property were almost negligible, being only \$75. The representative of another company stated at the meeting that his experience of twenty years had taught him that small villages gave better risks than farms, but he objected to insurance in large towns. Another company insures village property separated by 100 feet from other buildings, and yet another village property so separated by 25 feet. One company at first insured only houses situated 100 feet from other buildings but has reduced this interval successively to 50, 30 and finally 15 feet. Similarly some companies insure motor-cars and farm machinery while others refuse to do so. One company insures motor-cars as farm machinery for two thirds of their value in the first year, one fourth less in the second year, one fourth less in the third year, and one fourth of the original insurance in the fourth and fifth years. Another company insures them at a value of not more than \$400 and pays two thirds of the appraised value if the machine is destroyed. Yet another insures them for two thirds of their value in the first year and 20 per cent. less in the second.

The necessity of providing a standard insurance policy, to replace the present diverse collection, is therefore evident and will gradually be recognized by the rural population.

Facilities for insurance are defective, and this fact together with the tendency of mutual companies to assume too great risks may have formidable consequences. There is therefore a demand for such a modification of the law as will allow the farmers' mutual fire insurance companies to share their surplus of risks.

This tendency to unification and co-operation among the mutual companies cannot fail to be to them a new and powerful factor of progress.

Part III: Credit

RUSSIA.

THE ACTIVITY OF THE STATE LAND BANK FOR THE NOBILITY IN 1915.

OFFICIAL SOURCES :

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The State Land Bank of the Nobility has recently published a report for 1915. From this it appears that the year was characterized by a diminution of the bank's mortgage business. This business had gained a really notable ascendancy in the beginning of the twentieth century but diminished under the reaction from the influence of the war.

§ 1. MORTGAGE BUSINESS.

The number of loans made on mortgages by the Bank of the Nobility in 1913, the time when the rise of which we have spoken reached its highest point, was 1425.

If this figure be compared with the number of mortgage loans made by the bank in 1915, namely 470, a serious retrogression in mortgage business will be observed. This was, as the report states, a result of the war, which influenced the whole of this year. It also depended to some extent on the ordinance of the Committee of Finances of 23 July 1914 which limits mortgage business.

The following table may give a more precise idea of the general development in recent years of this bank's mortgage business :

TABLE I. -- *Mortgage Business of the Bank of the Nobility from 1911 to 1915 (in roubles).*

Year	Number of loans	Area mortgaged — deciatines (1)	Estimated value of mortgaged properties		Sums lent	
			total roubles (2)	by deciatine roubles	total roubles	by deciatine roubles
1911	1355	1,101,685	152,166,685	138	88,842,600	81
1912	1486	1,195,873	190,358,777	159	109,314,100	92
1913	1425	1,536,873	253,726,195	165	146,082,000	95
1914	1292	1,123,808	197,590,208	176	114,420,400	102
1915	470	496,901	71,553,744	144	41,827,300	84

This table shows that far fewer loans were made in 1915 than in 1914, and fewer by still more than during the years before the war. That which however chiefly characterizes 1915 is the sudden interruption in the constant rise of the average estimated value of the deciatine. The fall of its average value is seen to be more remarkable if it be compared to the *special* estimated average value which continued to rise even in 1915. Thus in 1911 this was 105 roubles a deciatine, in 1912 it was 125 roubles, 159 roubles in 1913 and 160 roubles in 1915. As the *normal* estimate is based on the average cost of land in a locality, and the *special* estimate on a special and detailed survey of the properties concerned, the different courses of the *normal* and the *special* estimates are an index to the different influence which the economic crisis caused by the war has had on farms in general, which in their large majority belong to the peasants, and on the property of the hereditary nobility. The war has deprived the peasants of a large number of labourers whom it has been impossible to replace. Hence has arisen the diminution in the average estimated value of lands, an important percentage of which it has been impossible to cultivate or to cultivate adequately. The needed labour on the lands of the nobility was however partly supplied by prisoners of war and in some provinces by the forced labour of peasants.

During 1915 the increase in the *special* estimated value was however slight in comparison with its increase in preceding years, and this fact and

(1) 1 deciatine = 2.698 acres.

(2) 1 rouble = 2.13335. at par.

the diminution in the *normal* average estimated value are explained by a very considerably lessened buying and selling of lands as a consequence of the war. The figure representing the purchase of land by peasants, who are the great majority of the purchasers, was less than a third of such figure for the preceding year. The development of the mortgage credit easily obtained from the Agriculturists' Bank much stimulated the purchase and sale of lands. The peasants, seeking to satisfy their "land hunger", caused prices to rise to unprecedented heights, yet further raised artificially — conditions which have been experienced in other European countries. The war caused these purchases and sales to diminish and thus caused also a fall in the price of land.

Of the 470 loans made by the Bank of the Nobility in 1915, 131 of the total sum of 3,864,200 roubles were secured by first mortgages on a total area of 71,502 deciatines of land previously unburdened in relation to the bank. The remainder, namely 339 loans of a total sum of 37,963,000 roubles were granted on renewed or complementary mortgages on 425,399 deciatines of land already mortgaged to the bank.

The following table gives a more exact idea of the indebtedness of the lands mortgaged to the bank :

TABLE II. — *Indebtedness of the Lands mortgaged to the Bank from 1906 to 1915.*

Years	In relation to the total number of mortgaged properties		In relation to the total mortgaged area	
	Properties un-mortgaged	Properties already mortgaged	Unmortgaged area	Area already mortgaged
	%	%	%	%
1906 . . .	32	68	39	61
1907 . . .	22	78	8	92
1908 . . .	25	75	12	88
1909 . . .	20	80	12	88
1910 . . .	24	76	13	82
1911 . . .	21	79	12	88
1912 . . .	24	76	17	83
1913 . . .	22	78	18	82
1914 . . .	23	77	27	73
1915 . . .	21	79	10	90

Since the Bank of Nobility first began business it has granted loans secured by mortgages on lands already largely mortgaged, so that it has reduced the terms on which the nobility can obtain land credit from banks and individuals. During the years of crisis the activity of the bank was limited to support of the properties economically weakest, that is to say already burdened with mortgages. This phenomenon is to be observed in 1907 when the percentage of the area already mortgaged was 92 and in advance of all precedents. The year 1915 comes very near to 1907, its

corresponding percentage being 90 and indicative of the seriousness of the crisis of 1915 for the landed property of the nobility.

The number of loans granted on the security of *normal* mortgages was only 114 or 24 per cent., while the other mortgages, 75 per cent. of the total number, were made after a *special* estimate. The total percentage of loans thus made during the year was 90.

The total sum for which the 470 persons, whose applications were accepted, applied as loans was 46,951,000 roubles. The bank could grant 41,827,000 roubles or 89 per cent. of the sum demanded. During the last six years the relation between the demand and the supply of loans was as follows:

TABLE III. — *Relation between the Demand and Supply of Loans.*

Years	Number of cases in which the whole sum demanded was lent	Sum lent per 100 roubles demanded — roubles
1910	86	52
1911	92	51
1912	92	40
1913	84	46
1914	93	49
1915	89	57

It is apparent from this table that during these six years the whole sum demanded was lent in the largest percentage of cases. The bank sought to concentrate its aid on the neediest properties and was, in view of the crisis, obliged in many cases to lend the whole sum demanded.

The average area of the properties mortgaged to the bank on 1 January 1915 was 498 deciatines; that of those mortgaged afresh in 1915 was 546 deciatines. The greater part, namely 61.9 per cent., of the latter belonged to the class of medium-sized farms (from 100 to 1000 deciatines of cultivable land); 23.6 per cent. were small farms of less than 100 deciatines; and the remainder, namely 14.5 per cent., were large properties of more than 1,000 deciatines. Of the total area of the properties mortgaged in 1915, 60.8 per cent. belonged to the class of large properties (more than 1,000 deciatines of cultivable land); 36.8 per cent. to that of medium-sized properties and 2.4 per cent. to that of small properties. These data, if compared with those for the years from 1905 to 1915, confirm the statement that medium-sized properties have least power of economic resistance. Table IV shows that it is exactly in periods of crisis, as in the years from 1908 to 1910, or even more so in the period in which the consequences of a crisis are more felt, that the percentage of mortgaged properties of medium size rises; for these properties are those which need most care and support in order that they may surmount a crisis.

TABLE IV. — *Mortgaged Properties according to Size.*

Year	Relatively to number of mortgaged properties			Relatively to total area		
	Large properties %	Medium-sized properties %	Small properties %	Large properties %	Medium-sized properties %	Small properties %
1906 . .	27.2	55.8	17.0	84.3	15.0	0.7
1907 . .	28.2	51.3	20.5	77.9	21.1	1.0
1908 . .	16.2	62.0	21.8	59.7	38.1	2.0
1909 . .	18.4	63.6	18.0	65.8	32.7	1.5
1910 . .	13.2	60.4	26.4	68.1	29.8	2.1
1911 . .	16.1	56.0	27.4	71.6	26.4	2.0
1912 . .	15.5	56.8	27.3	71.7	26.6	1.7
1913 . .	18.9	58.1	23.0	77.9	20.9	1.2
1914 . .	16.7	57.1	26.2	77.0	21.7	1.3
1915 . .	14.5	61.9	23.6	60.8	36.8	2.4

An examination of transactions in each district shows that large districts in which the capitalist system of cultivating land is followed give most resistance to a crisis, and that resistance is comparatively weak where the large properties are still in the stage of primitive cultivation.

In 1915 loans were secured by renewed mortgages on 399 properties having a total area of 425,339 deciatines and a value of 63,919,857 roubles. The total sum thus lent was 37,963,100 roubles, of which 23,825,600 roubles was the sum granted when the loan originated and was renewed, while the remaining 14,137,500 roubles or 60 per cent of the total sum lent was the sum of the complementary loans made at the time of renewal. Throughout the year only one privileged loan was granted to the Russian nobles to enable the purchase of properties in the provinces of West and South-West Poland. This loan was of 150,000 roubles and the land bought had an area of 2,000 deciatines. The following table will give a more exact idea of the development of renewals of mortgages from 1901 to 1915.

TABLE V. — *Renewals of Mortgages from 1901 to 1915.*

Year	Number of loans	Number of loans on renewed mortgages	Percentage of renewed loans %	Sums lent roubles	Percentage of sums lent on renewed mortgages %
1901 . . .	1950	894	46	26,549,500	62
1902 . . .	1841	975	53	64,512,400	67
1903 . . .	1549	858	55	66,523,700	73
1904 . . .	1259	722	57	52,950,100	75
1905 . . .	846	545	64	39,782,200	81
1906 . . .	625	378	60	32,788,200	73
1907 . . .	280	202	72	26,164,000	92
1908 . . .	518	326	63	26,549,500	84
1909 . . .	784	525	67	49,701,600	82
1910 . . .	1248	802	64	87,125,400	72
1911 . . .	1355	894	66	88,842,600	78
1912 . . .	1486	940	63	109,314,100	73
1913 . . .	1425	948	66	146,082,000	71
1914 . . .	1292	849	66	114,290,400	71
1915 . . .	407	339	72	118,273,000	91

As is seen from this table the percentage of the renewed mortgages is very high and the number of the loans made by the bank in the course of the last fifteen years is very low; and the agrarian disorders brought grave loss to the property of the nobility only in 1907, the last year in which they occurred. In other words this table is proof of the crisis active in Russia in 1915, to get the better of which the bank had to help land already burdened with mortgages.

As for the definite results of the privileged mortgage business, represented by a sum equal to 75 per cent. of the value of the mortgaged lands, which aimed at enabling the nobles to buy lands in Poland, it did not reach too high a figure. From 1894, the date of the first transactions of this kind, the bank has thus facilitated the passage to the ownership of Russian nobles of 228 farms which previously belonged to Poles. Their total area was 533,024 deciatines and their total estimated value 32,316,921 roubles.

TABLE VI. — *Privileged Mortgage Transactions to enable the Purchase of Land in Poland.*

Area bought with the bank's aid from 1894 to 1915				In the hands of the purchasers after the transaction			
Number of farms	Area of land bought Deciatines	Estimated value Roubles	Amount of loan Roubles	Number of farms	Area of land bought Deciatines	Estimated value Roubles	Amount of loan Roubles
28	560,887	36,150,931	26,971,500	92	205,255	14,708,746	11,010,400

§ 2. SALE OF PROPERTIES.

Of the 41,827,300 roubles, which are the total sum of the loans granted by the Bank of the Nobility in 1915, a sum of 13,772,400 roubles was paid to the borrowers in the form of bank bonds. And as bank bonds of 1915 could be realized at 77.7 per cent. on an average, the sum really received by the owners of the mortgaged lands was about 10,700,000 roubles or approximately 25 per cent of the total sum granted by the bank. This fall in the current rate of bank bonds caused the proportion of the sum granted to that actually paid to borrowers to be less than it had been for six years. In the years from 1910 to 1915 the percentages formed by the sums paid were respectively, 38, 36, 37, 40, 39 and 26, and the percentages formed by the sums retained were therefore 62, 64, 63, 60, 61 and 74.

The remainder was represented by the renewed debt to the bank of 22,489,000 roubles, and the sums retained for the extinction of foreign mortgages or other purposes, which amounted to 5,565,900 roubles.

In the whole course of the bank's existence mortgages to various mortgage credit banks have been redeemed up to the amount of 1,095,700 roubles.

The following table gives a more exact idea of the bank's business from 1886 to 1915.

TABLE VII. — *Redemption and Mortgage Renewal Business from 1886 to 1915.*

Bank	Redemptions & renewals in terms of thousands of roubles							Total
	1886-1890	1891-1895	1896-1900	1900-1905	1906-1910	1911-1915	1915	
Bank of the Nobility	4,100	73,800	150,300	156,800	109,800	240,400	22,500	698,600
Special office of that bank .	15,900	15,800	51,300	2,400	400	1,200	100	86,809
Other mortgage credit banks	110,600	52,400	80,500	31,300	9,400	30,100	200	310,300
Total . . .	130,600	142,000	282,100	190,500	119,600	271,700	22,800	1,095,700

The sums intended for amortization, paid voluntarily and in advance to the bank by borrowers in 1915, reached the sum of 3,521,855 roubles. These payments emancipated from all burden of mortgage 629 properties having a total area of 106,045 deciatines, of which 62,917 remained the property of persons belonging to the hereditary nobility, while 46,128 deciatines were ceded to persons outside the nobility for the whole time for which they should remain mortgaged to the Bank of the Nobility.

The total sum paid in 1915 comprised 1,822,439 roubles paid by the nobles and 1,599,416 roubles paid by persons not belonging to the nobility.

A comparison of data for previous years with those of 1915 gives the following table, which makes clear the large diminution of redemptions in 1915.

TABLE VIII. — *Voluntary Redemptions from 1910 to 1915.*

Year	Redemption		Percentage of debts redeemed		Percentage of mortgaged land emancipated	
	Area freed from mortgages — deciatines	Sums intended for redemption — roubles	Sums paid by the nobility — %	Sums paid by others than nobles — %	Lands belonging to nobles — %	Lands belonging to others than nobles — %
1910.	239,144	7,228,170	0.7	6.1	1.1	5.6
1911.	401,529	11,386,067	0.1	8.6	1.2	12.9
1912.	232,917	6,716,872	0.8	5.4	0.9	6.7
1913.	247,334	7,236,954	0.9	5.3	1.2	7.3
1914.	148,334	5,179,433	0.7	3.8	0.8	1.7
1915.	97,043	1,616,066	0.3	1.3	0.5	1.7

This table shows one fact which is not without interest, namely that the most important redemptions are made by persons who do not belong to the nobility.

The total number of properties mortgaged to the bank which changed ownership during 1915 was 1544. Their total area was 691,983 deciatines and they were burdened with a total mortgage debt of 29,443,300 roubles which changed ownership with them.

These properties were distributed as follows among the classes of society :

TABLE IX. — *Sale in 1915 of Properties mortgaged to the Bank of the Nobility.*

Purchasers	Number of alienated properties	Area — — deciatines	Mortgage debt burdening alienated properties — — roubles
1. Hereditary nobility . . .	373	227,620	15,062,800
2. Institutions (largely the Bank of Agriculturists) . .	31	7,802	719,200
3. Peasants	951	88,455	6,116,100
4. Middle class	35	4,288	270,800
5. Traders	39	291,970	4,156,600
6. Various others	115	71,848	3,117,800
Total	1,544	691,983	29,443,300

The data as to the alienation of properties mortgaged to the bank during the fifteen last years are also of notable interest. The alienations were as follows :

TABLE X. — *Sale from 1901 to 1915 of Lands mortgaged to the Bank.*

Purchasers	Area of lands sold			
	1901-1905 deciatines	1906-1910 deciatines	1911-1915 deciatines	Total deciatines
Institutions (the Bank of the Agri- culturists) . . .	16,735	2,045,197	117,058	2,178,990
Peasants	477,096	1,866,164	1,168,402	3,511,662
Middle class	89,585	72,861	78,902	241,348
Traders	434,329	159,474	162,894	756,697
Various others . . .	471,728	336,657	472,782	1,281,167
Total	1,489,483	4,480,353	2,000,028	7,969,864

The large extent of land which in these fifteen years became the property of persons outside the nobility, namely 7,969,864 deciatines, confirms the statements in "Material for Statistics as to the Transmission of Lands in Russia." The fact is therefore that nobles lose land and peasants come to possess it. Most of the land bought by the credit institution is resold on privileged terms to small landless cultivators; and if the 2,178,999 deciatines bought by these institutions be added to the 3,511,622 sold directly to the peasants, the enormous total is reached of 5,691,621 deciatines which have passed from the hereditary nobility to small cultivators in the space of only fifteen years. 71.6 per cent. of these lands were sold to persons outside the nobility. If we examine the sale of mortgaged lands during the same fifteen years we find that the nobility constitute a large percentage of the purchasers, which is to say that a large although a diminishing percentage of the lands sold remain in the possession of the nobility. In the first quinquennial period, that lasting from 1901 to 1905, 63.2 per cent. of the total number of purchasers of lands mortgaged to the bank belonged to the nobility and only 14.8 per cent. to the peasantry. In the second quinquennial period, 1906 to 1910, the nobles constituted 29.6 per cent. and the peasants 61.2 per cent. of the purchasers. From 1911 to 1915 the nobles constituted 46.1 per cent and the peasants 31.2 per cent. of the purchasers, which is to say that the nobles had regained a predominance. But if the figures for this last period be examined from year to year a marked rise in the percentage of peasant purchasers is discovered in the first year and a fall of 32.3 per cent. in 1915. Not only does a large extent of mortgaged lands pass to persons outside the nobility and especially to the peasants, but this extent tends to increase while the purchasing power of the hereditary nobility diminishes. At the same time a certain extent of land passes to traders, that is to say the capitalist middle class. This merely confirms the perspicuous remarks of Leroy-Beaulieu in his work on Russia: "The Russian nobility, no longer protected against others and themselves by the impossibility of selling to persons of a class not sheltered by the system of succession, are exposed to slow expropriation in favour of the

middle class and the peasants, who every year become possessed at their expense of a larger share of the soil."

On 1 January 1915 the total sum of arrears due to the bank by borrowers was 26,024,192 roubles. During 1915 the bank should have received as current mortgage revenue 43,167,391 roubles, plus 729,218 roubles in special revenues, or a total sum of 43,896,610 roubles. It recovered however only 39,131,810 roubles. At the end of 1915 the total sum of arrears was 31,082,105 roubles. This very large sum is the best index to the crisis of which we have already spoken.

Besides the sum of debts contracted on mortgages, which was 853,973,206 roubles, and that of arrears which was 31,082,155 roubles, borrowers were also indebted to the bank on 31 December 1915 for 133,193 roubles not bearing interest, 1,167,525 roubles which constituted *special* debts, and 1,563,627 roubles of deferred interest. Moreover by the law of 26 April 1906 the Bank of the Agriculturists was the debtor of the Bank of the Nobility to the extent of 166,437,668 roubles.

The total number of mortgaged properties, the sale of which by public auction was decreed in 1915 because legal charges had not been paid for more than a year, was 7,364 or 26 per cent.

The following table gives a more exact idea of the number of properties of which the sale by public auction was decreed :

TABLE XI. — *Properties of which the Sale by Public Auction was decreed from 1901 to 1915.*

Year	On 1 May		On 1 November		In whole year
	Number of properties of which the sale by auction was decreed	Number of properties to be sold by auction in relation to total number of mortgaged properties %	Number of properties of which the sale by auction was decreed	Number of properties to be sold by auction in relation to total number of mortgaged properties %	
1901 . . .	2,284	11	2,598	13	24
1902 . . .	2,401	11	2,533	12	23
1903 . . .	2,680	12	2,515	11	23
1904 . . .	2,632	11	2,083	13	24
1905 . . .	2,975	12	2,999	12	24
1906 . . .	3,815	15	4,226	17	32
1907 . . .	4,359	17	4,309	17	34
1908 . . .	4,359	17	4,141	16	33
1909 . . .	4,072	16	3,739	15	31
1910 . . .	3,486	14	3,057	12	26
1911 . . .	2,611	10	2,516	10	20
1912 . . .	2,576	10	2,710	10	20
1913 . . .	2,625	10	2,827	10	20
1914 . . .	3,080	11	2,736	10	21
1915 . . .	2,521	12	3,843	14	26

This table shows once more that 1915 was a year of crisis; but it is interesting to note that, in spite of what can be deduced from the number of properties of which the sale by auction was decreed, the economic depression of this year did not reach the gravity of the crisis of 1906-1908.

This table also shows that the position of the mortgaged properties is far from brilliant. In 7,320 out of the 7,364 cases of which we have spoken the auction could be revoked, either because the charges were paid at the last moment (4,055 cases), or because the term for payment was prorogued, or because the bank gave other facilities to the tardy (3,265 cases). In other words the auction could be revoked in 3,265 cases, thanks to various facilities "which had a beneficent character". Only 44 properties were actually put up for auction, and of these 37 were sold while five remained the bank's property. It is interesting here to note that, according to one of the bank's reports, "the credit of the sold properties had been exploited by the proprietors up to its final limit; their sale was not due to influences of the moment but was the inevitable consequence of the absolute impotence of these properties to continue to enjoy credit."

The total number of properties which have thus passed to the bank became 120, of which 102 are situated in the Caucasus.

§ 3. THE BANK'S FUNDS.

In the beginning of 1915 the funds of the Bank of the Nobility were as follows:

- 1) A capital formed by various issues of bonds of the total value of 948,700,700 roubles.
- 2) A capital of 74,942,097 roubles constituted by bonds issued in 1889 and not repaid.
- 3) A reserve capital of 12,583,618 roubles.

During the year bonds for 19,337,700 roubles were issued. In all 8,807,300 roubles were repaid. At the end of the year the bank's bonds reached the total amount of 960,231,100 roubles, distributed as follows:

Bonds	3.5 %	. . . . .	389,445,000	roubles
"	4 %	. . . . .	145,202,100	"
"	4.5 %	. . . . .	239,948,700	"
"	5 %	. . . . .	149,705,300	"
"	5 %	in lots	35,930,000	"
Total . . .			960,231,100	"

During 1915 the capital formed by 1889 bonds in lots did not change (74,942,097 roubles).

In 1915 the reserve capital was increased by 3,452,635 roubles and thus the bank's reserve fund reached on 31 December the sum of 15,986,253 roubles.

Besides this capital the Bank of the Nobility disposed at the end of 1915 of real estate of the total value of 1,311,800 roubles, plus other and various assets amounting to 17,318,586 roubles, and also of a special commemorative capital of ten million roubles.

To sum up: during 1915 the Bank of the Nobility notably reduced those of its transactions on which the crisis due to the war had an unfavourable influence.

There was an important diminution in the bank's loans, a notable diminution in its emission of bonds (89,948,800 roubles in 1913, 70,138,500 roubles in 1914 and 19,337,700 roubles in 1915); a fall in the current value of bonds (90.5 per cent. of their nominal value in 1913, 81 to 90 per cent. in 1914, and 75.2 to 81.625 per cent. in 1915); an important decrease in amortization (12,490,703 roubles in 1913, 10,156,811 roubles in 1914 and 3,552,577 roubles in 1915); and a decrease in the extent of land mortgaged (this increased by 163,546 deciatines in 1914 and decreased by 78,330 deciatines in 1915). On the other hand there was a very notable increase in the amount of unpaid interest.

It follows on the preceding data that the bank's mortgage business tends to diminish, and that 1915 was marked by too sudden a movement in accordance with this general tendency.

It also follows that the percentage of renewed mortgages tends constantly to increase, and this is important. In the mass of the business it is these renewals and the complementary mortgages which prevail. This is because in the large majority of cases loans to the nobility served not to improve their farms but to meet expenses of another kind. Thus with all the facilities granted mortgages have on the whole aggravated the condition of properties. They marked very often the first stage towards liquidation, towards the passage of a property to the ownership of persons outside the hereditary nobility.

NOTICES RELATING TO CREDIT IN VARIOUS COUNTRIES.

GERMANY.

ALTROCK (Walther V). *Kur und Neumarkisches Ritterschaftliches Kreditinstitut und neues Brandenburgisches Kreditinstitut. Veröffentlichungen des Königl. Preussischen Lands-Oekonomie-Collegium (The Institutions of Land Credit for the Fiefs of Kurmark and Neumark and the New Credit Institute of Brandenburg. Publications of the Royal Prussian College of Agrarian Economy)* Pamphlet 17. Berlin 1915.

In this book are set forth the origin and development of two special mortgage institutions of Brandenburg and the results obtained by the action of each.

Of them that known as the *Kur- und Neumarkisches Ritterschaftliches Kreditinstitut* was formed on 15 June 1777. As its name indicates it is one of the special financial institutions the operations of which affect feudal-landed property, such property securing the mortgage deeds they issue, which are insured by the collective guarantee of all those who compose these institutes.

This particular establishment is distinguished among the numerous German financial institutions because its mortgage deeds are guaranteed only by the group of proprietors who are its members and own the mortgaged properties in question, and not by all the local nobility, as in Silesia and Pomerania, nor by all the proprietors of fiefs, as in Prussia.

According to the by-laws of 1777-1784 the following may belong to this institution :

- a) All nobles whose property in land is worth more than 6,000 thalers (1) ;
- b) All landowning commoners whose rural property is worth more than 20,000 thalers.

The activity of the institution is limited to the territory of Brandenburg as this was defined in 1777 ; that is to say to the districts of Stendal, Salzwedel, Gardelegen and Osterburg in Saxony, Schevelbein, Dramburg, Pyritz, Saatzig, Regenwald and Randord in Pomerania, and to the single district of Grünberg in Silesia. The districts annexed to Brandenburg after 1777 are excluded, those namely of Sternberg, Niederlawitz and Füterbog-Luckenwald.

The annual statistics for 1890 supply, as shown by the following table, the number of landed properties authorized to belong to the mortgage institute :

(1) 1 thaler = 2s. 11 $\frac{1}{2}$ d. at par.

Provinces	Number of Fiefs	Other Properties	Number of Properties
Brandenburg	1,213	173	1,386
Saxony, Pomerania and Silesia	252	27	279
Total	1,465	200	1,665

It will be useful to give here some statistical data as to the business of the institute from 1875 to 1913, taking every period of five years :

	Number of Mortgaged Properties	Year	Number of Mortgaged Properties
1875	651	1900	1,000
1880	777	1905	955
1885	940	1910	900
1890	1,008	1913	881
1895	1,029		

This table shows that the number of mortgaged properties increased steadily from 1875 to 1895 but decreased steadily from 1895 to 1913.

As to the total debt secured by mortgages the statistics show that this grew steadily from 1875 to 1900, and then diminished saving for some oscillations. The fact appears from the following figures :

Year	Total Debt secured by Mortgages Marks (r)	Year	Total Debt secured by Mortgages Marks.
1875	89,097,732	1900	194,928,550
1880	120,703,410	1905	192,291,160
1885	152,551,580	1910	182,361,730
1890	180,618,200	1913	188,725,920
1895	192,303,100		

The average amount of a debt secured by a mortgage is shown by the following table to have increased continually from 1875 to 1913 :

Year	Average Amount of a Debt secured by a Mortgage Marks.	Year	Average Amount of a Debt secured by a Mortgage Marks.
1875	136,835	1900	194,929
1880	155,347	1905	201,352
1885	162,289	1910	202,624
1890	179,185	1913	214,218
1895	185,912		

The mortgage deeds bear interest at various rates — 3, 3½ and 4 per cent. The rates in 1913 were as follows :

1 mark = about 11 ¾d at par.

Mortgage Deeds. — Marks.	Rate of interest. —
66,951,200	3 per cent.
108,859,030	3 ½ per cent.
12,915,690	4 per cent.
188,725,920	

Mortgage deeds at 4 ½ per cent. were in circulation until 1880 when they were converted into deeds at 4 per cent.

An autonomous department of this institute, which was formed in 1873 and is known as the *Kur und Neumärkische Ritterschaftlich Darlehenskasse*, acts — as its name indicates — as the establishment's lending fund and transacts all relevant business.

* * *

The second institution of which we here have to speak, the *Neues Brandenburgisches Kreditinstitut*, was formed on 30 August 1869. Its promoters aimed at securing the advantages of credit for commoner landowners, as much as or even more than for the nobility, thus supplying the gap left by the first institution we have noticed.

According to the rules of 1911 the institution admits all landed proprietors not members of the *Kur-und Neumarkisches Ritterschaftliches Kreditinstitut* who own more than five hectares (1) of land.

Its activity extends over all the present territory of Brandenburg and also over the districts which belonged to Brandenburg until 1869 and were then separated from it (Osterburg, Stendal and Gardelegen in Saxony, Schevelbein, Dranburg, Saatzig and Regenwald in Pomerania, and Grünberg in Silesia).

The number of commoner landowners belonging to this institute is, according to the statistical data of 1911, 83,125 — that is 69,476 in the whole territory of Brandenburg, and 13,649 in Saxony, Pomerania and Silesia.

The following table gives some other noteworthy statistical data — as to the number of properties mortgaged and as to the total debt secured by mortgages from 1875 to 1912.

Year. —	Number of Mortgaged Properties. —	Debt secured by Mortgages. Marks. —
1875	22	739,950
1880	93	3,694,600
1885	1,377	30,144,800
1890	4,195	74,274,300
1895	6,649	105,672,900
1900	9,007	130,972,350
1905	9,931	141,729,150
1910	10,375	142,072,800
1912	10,444	146,202,400

(1) 1 hectare = 2.47 acres.

The figures of this table show that both the number of mortgaged properties and the sum of the mortgage debt increased continuously from 1875 to 1912.

On the other hand the average amount of a debt secured by a mortgage diminished continuously in the same period, in contrast to the phenomenon noticed in the case of the first institution with which we dealt. The fact is clearly shown by the following table :

Year.	Average Amount of a Debt secured by a Mortgage. Marks.	Year.	Average Amount of a Debt secured by a Mortgage. Marks.
1875	33,634	1900	14,541
1880	39,727	1905	14,272
1885	21,892	1910	13,820
1890	17,705	1912	13,999
1895	15,893		

The rate of interest on mortgage titles is 3, $3\frac{1}{2}$ or 4 per cent., as is shown by the following figures which refer to 1912 :

Mortgage Titles Marks.	Rate of Interest.
26,090,300.	3 per cent.
116,008,850	$3\frac{1}{2}$ per cent.
4,103,250.	4 per cent.

Until 1875 mortgage titles at 4, $4\frac{1}{2}$ and 5 per cent. were current. Those at 5 per cent. were converted in 1880, those at $4\frac{1}{2}$ per cent. in 1885, and finally those at 4 per cent. in 1895. From 1895 to 1911 only titles at 3 and $3\frac{1}{2}$ per cent. were in circulation, but in 1912 titles at 4 per cent. were again issued.

UNITED STATES.

THOMPSON (C. W.) : FACTORS AFFECTING INTEREST RATES AND OTHER CHARGES ON SHORT TIME FARM LOANS, pp. 12, pls. 2. *U. S. Dept. Agr. Bul.* 409 (1916).

Among the factors discussed are the natural conditions affecting agriculture, the distance of farms from financial centres, the character of the borrowers, the methods and character of the farming, and the characteristics of loans and the relation of the farmer to the lending agency.

Part IV: Agricultural Economy in General

GREAT BRITAIN.

THE SCOTTISH LAND COURT IN 1915. (1)

OFFICIAL SOURCE:

REPORT BY THE SCOTTISH LAND COURT as to their Proceedings under the Small Landholders (Scotland) Acts 1886 to 1911, 1 and 2 Geo. v. Cap. 49, for the year from 1st January to 31st Decembre 1915.

§ 1. SCOTTISH SYSTEMS OF LAND TENURE.

The systems of land tenure in Scotland may be classified under four main headings:

a) *The crofter tenure.* — A typical crofter's holding consists of a small extent of arable land on which are a cottage and other buildings, provided by the crofter himself or one of his predecessors, and of a right of common in mountain and heath grazing lands. Crofter holdings are found in the Northern and Western Highlands and Islands, and mainly in the so-called "crofting counties" which are Argyll, Caithness, Inverness, Orkney, Ross and Cromarty, Shetland and Sutherland. These counties extend over 14,000 square miles or nearly half the total area of Scotland, but they included in 1912 only 15 per cent. of the cultivated land of the country. Their larger part is untitled moorland.

In 1912 the average area of land attached to a holding in the crofting counties was 24 acres. But in some districts, especially in the island of Lewis, this average was not nearly reached.

Before the Crofters' Holdings Act of 1886 and succeeding legislation a crofter held his land only from year to year. The landlord had unrestricted power at each year's end either to evict him or to raise his rent. The crofter who improved his holding was therefore first in doubt as to whether he would be able enjoy the effect of his improvements, and secondly in fear that their most immediate effect would be the increase of his rent.

(1) Cf. in our issue for February 1914, p. 103, « Small Holdings in Scotland and the Effects of Recent Legislation regarding them », and in our issue for September 1915, p. 85 « Proposals for Land Reform in Scotland ».

The nineteenth century saw wholesale evictions of crofters by landlords, to provide land for large sheepfarms and to provide deer-forests. A resultant agrarian crisis caused the Crofters' Holdings Act of 1886 and the whole question of agrarian conditions in Scotland has since been raised.

b) *The small tenant's tenure.* — The holders of land classified by the Small Landholders' Act of 1911 as "statutory tenants" are distinguished from the crofters in that their landlords have paid for the whole or the greater part of their buildings and in that they do not enjoy rights of common. By far the greater number of Scottish small holdings outside the crofting counties are under this form of tenure. Like the crofts they were at one time tending to disappear; for from the eighteenth century onwards they were merged by their landlords into large farms, both arable and pastoral, or sacrificed in order to make grouse moors and deer forests.

Tenants of small holdings of both types in Scotland usually practice some industry other than farming. In the north they are fishermen; they or rather their womenfolk make tweed from their wool, and — especially in Shetland — knit it. In the Orkneys and the Hebrides they burn kelp. In the south they often follow a trade and those of them who are near large towns are sometimes market-gardeners.

c) *The large tenant's tenure.* — This form of tenure, found chiefly in South and East Scotland, approximates to that general in England. The landlord's estate is divided into large farms which he lets to farmers on lease. The peculiarities which distinguish these farms from the analogous English farms are outside the scope of this article.

d) *The tenure of freehold large farmers.* — The "bonnet lairds" of Scotland, who owned and farmed the hundred or couple of hundred acres on which stood their house, were still numerous in the eighteenth century; but the fortunes built up after the Union, and the ambition of fortunate Scotsmen to become landholders on the English scale, were against them. Very many of their holdings are now leasehold farms on the estates of large proprietors.

§ 2. CAUSES OF AGRARIAN REFORM.

The agrarian reforms which have been attempted in Scotland during the last thirty years have had various causes. There were first the grievances of the crofters and other smallholders — their insecurity of tenure and the disproportionate rents they sometimes had to pay — which eventually produced a public scandal and had the Act of 1886 as their immediate outcome. Secondly there was the fact that Scotland suffered from underfarming. This was due in part to the general circumstance that tenants at one and the same time were entitled to no compensation for their improvements and had no security of tenure. What large farmer or smallholder would sink capital in land from which he might be evicted at the expiry of his lease or the end of the year, unless he at least knew that he could then claim some compensation for his unexhausted capital? Other causes for underfarming

were the lack of capital from which both tenants and landlords suffered ; and the lowered price of grain after the repeal of the corn laws which made arable land less profitable than pastureland. This is to leave out of account the almost ridiculously large rents which tenants have for many years been more and more willing to pay for shootings in Scotland during the autumn, and which have placed a premium on under-cultivation.

A third circumstance which has made Scotland a field for agrarian experiments is political. The rate of emigration has increased alarmingly since the middle of last century, and the increase has been accentuated during the last decade, in which the contrary phenomenon has been produced in England and Ireland. Emigrants are drawn from no particular district and from no particular class of the agricultural population but from all alike. Between 1871 and 1911 the agricultural population declined by 22 per cent. ; and between 1909 and 1911 the number of emigrants rose from 33,368 to 61,328. It is true that Scotsmen have always been attracted to remote parts of the world and successful in them ; but it is probable that something might be done to arrest the tide of their emigration if further improvements were wrought in the agrarian conditions they enjoy at home.

§ 3. LEGISLATIVE REFORMS.

a) *Reforms general in scope.*

The conditions of Scottish farming leases in general have been mainly modified by the Agricultural Holdings (Scotland) Act of 1883, amended and completed in 1908. It was provided at the latter date that tenants, and in particular market gardeners, should have compensation for their improvements, and compensation for damage done by game and for "unreasonable disturbance" due to a landlord's refusal to renew their occupancy. They received moreover the right to bequeath the remainder of a lease and greater freedom as to their system of crops.

b) *Reforms having particular reference to small holdings.*

The grievances of crofters and small tenants were much alleviated by the Crofters' Holdings Act and the Small Landholders Act. The former, which was passed in 1886, applied only to crofts within the crofting counties rented at no more than £30 a year. It provided that a crofter might not be removed from his holding except for the breach of certain statutory regulations. It gave him the right to have his rent fixed fairly by a public authority ; and the right, if he gave up his holding or were removed from it, to receive compensation for his improvements and those effected by members of his family who had held it before him. The execution of the Act and the fixing of fair rents were entrusted to a specially constituted body, the Crofters' Commission.

Experience showed that there was a demand for more small holdings and that some of those in existence were too small for the needs of their tenants. In 1897 the Congested Districts' Board was established in Scotland

and its powers included that of forming new small holdings, either in co-operation with landlords or by buying land.

The Small Landholders Act was passed in 1911. This extended the provisions of the Crofters' Holdings Act so that they apply not only to the crofting counties but to all Scotland, and not only to crofters but also to all tenants of no more than 50 acres of land who pay a rent of no more than £50 a year.

In the matter of executive the Crofters' Commission and the Congested Districts' Board were both superseded, their powers in relation to small holdings passing to the Board of Agriculture for Scotland and the Scottish Land Court.

The Board of Agriculture has multifarious duties which include the preparation of schemes for the constitution of new holdings and the enlargement of existing holdings. The action involved is taken 1) by the landlord voluntarily, 2) by agreement between the landlord and the board, 3) under a compulsory order from the Scottish Land Court.

The duties of the Scottish Land Court are to accept or reject :

- 1) Applications from the board for such compulsory orders ;
- 2) Applications for the determining of the status of existing holdings and the fixing of fair rents ;
- 3) Applications relating to their other powers over existing holdings.

The court consists of five members appointed by the Crown on the recommendation of the Secretary for Scotland. One member must be able to speak Gaelic.

§ 4. THE SCOTTISH LAND COURT IN 1915.

a) *The Formation of New Small Holdings and the Enlargement of those already existing by order of the Court.*

In connection with this, a principal function of the Land Court, some sentences may be quoted from its report for 1915. " Under the Small Landholders Act the initiation of all schemes for the constitution of new small holdings and the enlargement of existing holdings devolves upon the Board of Agriculture for Scotland. All the preliminary negotiation is carried on between the board and the proprietor concerned. The Land Court have nothing whatever to do with these matters. They have no power to interfere with the selection of the land proposed to be taken, or to suggest that other land would be more suitable for the establishment of new holdings or for enlargements. Nor can they deal with the financial or economic aspects of any of the schemes submitted for their consideration. It is competent for the board and the proprietors to agree on land schemes without calling in the assistance of the Land Court at all. It is only when parties have failed to come to an agreement that the board makes application to the Land Court ".

The court issues its order if it decide, after due inquiry, to accept the board's application. Such order declares :

" 1) In respect of what land, if any, specified in the scheme, one or more holdings for new holders may respectively be constituted, and up to what date the power to constitute them otherwise than by agreement may be exercised ;

" 2) What is the fair rent for each new holding ;

" 3) What land, if any, specified in the scheme is to be excluded therefrom ; and

" 4) Whatever else may be necessary for the purpose of making the scheme effective, and of adjusting the rights of all parties interested in or affected by the scheme."

From the time the Act of 1911 came into force until the end of 1915 the court authorized altogether the constitution of 693 new holdings, including 22,946 acres of arable and 4,620 acres of pasture land, and 49,577 acres of common pasture. The total rents fixed for these holdings amount to £12,430 a year, or an average of nearly £18 each.

In 1915 schemes were authorized for the constitution of 197 new holdings ; but at the same time schemes for 32 new holdings, authorized both in this and in previous years, were abandoned, mainly in consequence of the serious liabilities incurred in connection with arbitrations. The new holdings in which tenants were actually registered in 1915, as the outcome of schemes authorized in this and other years, numbered 176. They were distributed as follows :

County	No. of Holdings	Area									Total Rent
		Arable			Outrun			Common Pasture			
		Acres	Roods	Poles	Acres	Roods	Poles	Acres	Roods	Poles	£ s d
Argyll.	22	2,831	1	11	843	3	24	256	2	—	495 9 0
Caithness	3	92	3	15	50	—	11	—	—	—	54 19 0
Dumfries	9	300	3	23	60	2	2	—	—	—	315 0 0
Haddington	29	582	2	31	—	—	—	—	—	—	1,098 10 0
Inverness	79	2,342	3	8	—	—	—	18,266	1	16	589 8 0
Kirkcudbright	4	152	2	32	67	1	23	—	—	—	159 0 0
Lanark	2	256	—	33	—	—	—	—	—	—	80 0 0
Perth	14	654	2	35	92	—	20	—	—	—	580 10 0
Ross and Cromarty	2	123	3	6	—	—	—	—	—	—	40 0 0
Roxburgh	7	290	1	18	—	—	—	—	—	—	233 5 0
Sutherland	5	99	—	3	—	—	—	4,571	—	—	57 4 0
Total . . .	176	7,727	1	15	1,114	—	—	23,093	3	16	3,703 5 1

It will be seen that the largest number of new holdings were in the crofting counties. Of those in Argyll seven were on the island of Mull, and all the 256 acres of common pasture mentioned in the table were appurtenant

to these and therefore also on the island. To the largest Mull holding 12 acres of arable land pertained, to the others 5, 4, 3 or less. The fifteen new holdings on the Argyllshire mainland were more important, their arable land varying from 34 to 680 acres in extent.

Of the Invernesshire new holdings 75, their arable land varying in area from 16 to 100 acres, were formed on the island of South Uist. Each of the remaining four new holdings in this county, those namely which were on the mainland, had from 14 to 88 acres of arable land. A share of common pasture was assigned to each Invernesshire holding, none of them having other pasture land.

The far more valuable Perthshire land lay on the estates of Breadalbane and Inchmartine and was distributed in new holdings of approximately uniform size, the arable land of each being from 39 to 55 acres in area.

We should notice finally the 29 holdings formed on the estate of Elbank in the lowland county of Haddington, probably the most fertile district in Scotland. These fall roughly into three classes, those consisting approximately of 5, 10 and 20 to 30 acres of arable land. One exceptional holding has 49 acres. Neither common nor other pasture attaches to any of them. Their proximity to Edinburgh and some less towns renders them suitable places for intensive agriculture. It will be noticed that they are far more highly rented than any of the other new holdings.

As regards the enlargement of existing holdings the Land Court effected this between 1911 and 1916 in the case of 348 holdings, to which were added altogether 2,838 acres of arable land, 536 acres of pasture land and 27,172 acres of common pasture.

Schemes were authorized in 1915 for the enlargement of 61 holdings, all of which lay in the crofting counties where the evil of holdings economically too small exists as it does not elsewhere in Scotland. The following table gives details as to the enlargements thus authorized :

County	Number of Enlarge- ments	Extent									Total Rent		
		Arable or Old Arable			Pasture			Common Pasture					
		Acres	Roods	Poles	Acres	Roods	Poles	Acres	Roods	Poles	£	s	d
Argyll	1	3	2	27	123	2	37	—	—	—	10	0	0
Caithness	6	91	3	9	—	—	—	—	—	—	39	13	0
Inverness	21	311	2	12	17	32	—	7,621	—	—	65	5	0
Orkney	11	109	3	9	—	—	—	793	—	—	40	9	6
Ross and Cromarty .	22	92	1	9	—	—	—	2,474	—	—	53	2	0
Total . . .	61	609	—	26	140	3	37	10,888	—	—	208	9	6

Twenty-one schemes for the enlargement of holdings in Argyll, Inverness and Ross and Cromarty, authorized in 1915 and previous years, were

withdrawn in 1915; and land was actually assigned to enlarge only 12 holdings, one in Caithness and the others in Argyll.

The activity of the Land Court in enlarging existing holdings may fairly be summed up as modifying the too great subdivision of land in the crofting counties.

b) *Registration of New Holdings and of Enlargements of Holdings formed by Agreement.*

It is a function of the Land Court to register the tenants selected by a landlord for the new holdings he forms, on land which has previously been otherwise occupied. Six such new holdings were registered in 1915, one in Argyllshire, the others in the south west and outside the crofting counties :

County	Number of Holdings	Arable			Outrun		
		Acres	Roods	Poles	Acres	Roods	Poles
Argyll	1	38	3	4	49	—	16
Ayr	2	31	—	29	—	—	—
Wigtown	3	126	3	2	—	—	—
	6	196	2	35	49	—	—

The Act of 1911 prohibits a landlord from reletting a small holding otherwise than as such, except with the consent of the Board of Agriculture. If the landlord be unwilling to pay the compensation for improvements due to an outgoing tenant it is usual for him to find a new tenant who will pay the outgoing tenant the value of such improvements and who is registered by the Land Court as a landholder. Twenty-seven new tenants were so registered in 1915.

In thirteen cases the Land Court registered enlargements of existing holdings effected by landlords by agreement. These were as follows.

County	Number of Existing Holdings	Extent of Enlargement						
		Arable			Outrun			Township Pasture
		Acres	Roods	Poles	Acres	Roods	Poles	Acres
Aberdeen	1	12	—	—	—	—	—	—
Argyll	1	—	—	—	12	2	38	—
Caithness	4	8	2	—	6	1	37	—
Dumbarton	1	27	2	16	—	—	—	—
Inverness	2	1	3	—	3	1	4	—
Ross and Cromarty . . .	4	—	—	—	—	—	—	3,000
	13	49	3	16	22	1	39	3,000

c) Modification of Rents.

The work of the Land Court in connection with rents falls under two heads, that concerned with the crofters, called landholders by the Act of 1911, and that concerned with the statutory small tenants.

The rents of the former had within the crofting counties been dealt with before 1911 by the Crofters' Commission, but rents fixed by the commission are liable to revision at the end of every seven years. The following table summarizes the Land Court's revision of rents in 1915, such revision being, as will be seen, favourable to the crofter rather than the landlord :

County	Number of Holdings	Old Rent			First Fair Rent			Reduction by Second Fair Rent			Fair Rent in 1915			Percentage of Reduction
		£	s	d	£	s	d	£	s	d	£	s	d	
Argyll	38	398	8	0	252	2	0	—	—	—	214	9	0	14.934
Caithness	170	1,794	0	5	1,274	2	0	201	13	0	1,003	8	0	21.246
Inverness	193	1,571	3	6	1,094	17	5	—	—	—	871	12	8	20.389
Ross and Cromarty	136	1,018	15	10	835	1	7	21	9	0	695	8	8	16.722
Shetland	49	305	8	0	222	6	8	—	—	—	186	12	0	16.071
Sutherland	8	27	17	11	32	16	0	—	—	—	26	6	0	19.817
	594	5,115	13	8	3,711	5	8	223	2	0	2,997	16	4	19.224

In 430 cases the Land Court fixed the fair rent to be paid for crofts with which the Crofters' Commission had not dealt, and in a considerable number of these cases arrears of rent were cancelled.

County	Number of Holdings	Old Rent	New Rent	Percentage of Decrease	Arrears		
					Total Amount	Amount ordered to be paid	Percentage cancelled
		£ s d	£ s d		£ s d	£ s d	
Aberdeen	21	339 2 8	209 1 0	38.357	—	—	—
Argyll	13	59 16 6	38 15 0	35.227	—	—	—
Bute	5	135 12 4	81 3 0	40.162	22 7 0	—	100
Caithness	152	1,385 13 7	1,096 15 3	20.850	685 18 0	347 10 6	49.392
Dumbarton	1	10 0 0	6 0 0	40.000	—	—	—
Elgin	6	41 0 0	27 5 0	33.536	51 8 6	20 0 0	61.108
Forfar	2	34 0 0	16 5 0	52.205	—	—	—
Inverness	14	94 19 3	79 1 0	16.756	80 7 3	33 19 0	57.753
Kincardine	1	29 12 0	12 10 0	57.770	22 16 3	—	100
Orkney	8	57 4 0	46 18 0	18.006	—	—	—
Perth	2	34 13 7	24 10 0	29.352	20 0 0	20 0 0	—
Ross and Cromarty	123	1,050 2 5	794 18 0	24.303	1,370 1 7	574 10 8	58.065
Shetland	82	423 5 8½	314 19 0	24.609	110 10 8	45 9 0	58.886
Total	430	3,695 2 0½	2,748 0 3	25.630	2,363 9 3	1,041 9 2	55.935

Thus total rents were reduced by more than a quarter, and more than half the aggregate sum of arrears was cancelled. The reductions of rent effected in the case of statutory small tenants were somewhat less drastic, existing conditions under this form of tenure being on the whole more equitable. The following table gives details as to the 243 holdings of statutory small tenants for which the Land Court fixed rents in 1915 :

County	Number of Holdings	Old Rent			New Rent			Percentage of Deduction
		£	s	d	£	s	d	
Aberdeen	95	2,706	9	1	2,127	16	0	21.362
Argyll	3	26	0	0	19	18	0	23.461
Caithness	58	598	2	2	514	8	0	13.995
Dumbarton	1	35	0	0	30	0	0	14.285
Dumfries	2	43	0	0	33	10	0	22.093
Elgin	8	134	1	0	96	0	0	28.384
Fife	2	61	0	0	52	8	0	14.098
Inverness	4	76	17	0	62	1	0	19.258
Kilncardine	8	237	10	7	178	15	0	24.746
Kirkcudbright	3	54	5	0	43	15	0	19.354
Lanark	4	280	10	0	234	0	0	16.577
Orkney	1	3	3	0	1	13	0	47.619
Perth	3	66	0	0	50	10	0	23.484
Renfrew	1	110	0	0	85	0	0	22.727
Ross and Cromarty . . .	27	643	12	11	530	13	8	17.550
Shetland	23	173	8	0	134	3	0	22.635
Total . . .	243	5,248	18	9	4,194	10	0	20.087

It should be noted that the Land Court has no power to cancel any arrears of rent in the case of statutory small tenants as it has in that of crofters. Even as regards the latter it may not deal with any arrears of a rent fixed as a fair rent either by itself or by the Crofters' Commission.

d) *Fixing Amount of Compensation due to outgoing tenants.*

In this connection there is another limitation of the competency of the Land Court. It can fix the amount of compensation due by a landlord for permanent improvements to the crofter who renounces his tenancy, but the sum thus due to a statutory small tenant in the same circumstances is fixed by an arbiter. In 1915 the court made 28 awards as to compensation to landholders:

County	Number of Landholders for whom Compensation was fixed	Amount claimed by Landholders	Amount awarded by Land Court
		£ s d	£ s d
Aberdeen	3	498 5 0	124 10 0
Calthness	13	1,952 2 11	955 10 0
Inverness	3	343 16 9	123 0 0
Ross or Cromarty	(1) 8	802 9 10 (1)	490 0 0
Sutherland	1	65 0 0	27 0 0
Total	28	3,661 14 6	1,720 0 0

(1) In two cases the amounts claimed were not stated.

e) Grants of Leave to assign Holdings.

The Crofters' Act of 1886 forbade that a crofter should "execute any deed purporting to assign his tenancy". This created a hardship for crofters disabled by age or infirmity; and the Act of 1911 therefore ruled that a landholder whom illness, old age or infirmity had rendered unfit for work might apply to the Land Court for leave to assign his holding to a member of his family, or any person who would, failing nearer heirs, succeed him if he died intestate.

In 1914 the court granted leave to assign their holdings to sixty applicants in the crofting counties and none outside them.

f) Effects of the War.

The War affected the work of the Land Court in several ways. In the first place the numbers of its staff were considerably reduced.

In the second place the extraordinary response made by Scotland to the call for recruits for the army and the navy caused the absence of the large majority of the younger crofters and statutory small tenants. The case may be instanced of 224 acres of the farm of Aignish on the Lewis, on which are thirty-two holdings: from these 53 men went to join the colours. The natural result of volunteering on this scale was a great reduction in the number of applications which came before the Land Court. The numbers of the landlords and factors and of the law agents they employ — of all those with whom the Land Court usually does business — were proportionately reduced.

Another cause for a lessening of the court's business was the deflection of public money from agrarian objects to others more directly connected with the war. The reduction of parliamentary grants tended to reduce the activities of the Board of Agriculture in the matter of promoting schemes for the formation of new holdings and enlargement of existing holdings, and thus to reduce the number of these schemes which came before the Land Court.

JAPAN.

INTERIOR COLONIZATION AND THE PROGRESS OF AGRICULTURE IN KOREA.

OFFICIAL SOURCE :

ANNUAL REPORT ON REFORMS AND PROGRESS IN CHOSEN (KOREA) 1914-1915, compiled by the Government-General of Chosen, Keijo (Seoul), July 1916.

The question of interior colonization in Korea has already been studied in this Review (1), and we will therefore here merely complete, with the help of the most recent official data, the information already given.

§ 1. AGRICULTURAL CREDIT.

Agriculture is the principal occupation of Korea and employs 80 per cent. of the population. Agricultural products have a total value of nearly 300,000,000 yen (2) and account for more than 80 per cent. of the total export trade.

The problem of agricultural credit is therefore urgent. Such credit is afforded a) by the Agricultural and Industrial Banks, b) by the People's Bank Associations, and c) by the Oriental Development Company.

The two former are organized under regulations dating, respectively, from 1906 and 1907. Owing to changes in the general position these regulations were modified in 1914.

a) *Agricultural and Industrial Banks.* — The new regulations recognize that these banks can discharge, as previously, the functions of ordinary banks, in addition to their main functions ; but require them gradually to confine their activity to the latter, by extending banking facilities more and more to agricultural and industrial enterprises in that they furnish funds to these on easier terms. The banks are especially authorized to deal with temporary loans, exchange bills, documentary bills and warrants for products obtained in the peninsula. In order to acquire funds for these operations the banks are however authorized to make temporary loans and receive ordinary deposits, apart from the funds provided for long-term loans for agricultural and industrial undertakings. They are also authorized to enter into close connection with the banking department of the Oriental Development Company, so that the latter may furnish larger working funds to them. To a certain extent they can act as the company's agents, much as People's Bank Associations act as agents to themselves. The Agricultural and

(1) See Nos. 7,8 and 9, year 1914, *Interior Colonization in Japan*.

(2) 1 yen = 2. 0664 s at par.

Industrial Banks were formerly authorized to issue debentures to the amount of five times their paid-up capital ; but the new regulations seek to safeguard their stability by imposing greater restrictions on the issue of debentures, and the maximum amount of these may not now exceed the amount of long-term loans repayable in annual instalments, and they must be cancelled as the loans are repaid.

Thanks to the new regulations and the gradual progress of industry and agriculture the Agricultural and Industrial Banks have been able to furnish much larger funds to the enterprises they can support. Their business in 1914 was however less good than in 1913 owing to the financial lull caused by the European war and the depression in the prices for rice. The number of branch offices of the six banks passed from 36 in 1913 to 37 in 1914, the amount of the paid-up capital from 1,467,945 yen to 1,469,890 yen, the amount of debentures issued from 2,990,000 yen to 2,910,000 yen, the reserve fund from 479,339 yen to 486,682 yen, the balance of the deposits from 4,599,926 yen to 4,718,821 yen, the balance of the loans from 6,280,105 yen to 8,028,558 yen, the balance of discounted bills from 5,303,517 yen to 3,526,090 yen and the profits from 215,649 yen to 125,409 yen.

The agricultural methods of the Korean people are rather elementary and loans for agricultural or industrial objects did not at first reach any considerable amount. Of late however, and especially since the annexation of Korea by Japan, an increasing demand has arisen for funds for irrigation, works of civil engineering and other agricultural enterprises ; and loans made for these purposes have therefore reached a considerable sum, as is shown by the following table :

Year	Loans to be repaid by Annual Instalments		Loans to be repaid at Fixed Periods		Ordinary Loans	Bills Discounted	Balance over- drawn in Current Deposit for Commer- cial Purposes	Total
	Agricultural Purposes	Indus- trial Purposes	Agricultural Purposes	Indus- trial Purposes				
	yen	yen	yen	yen	yen	yen	yen	yen
1908	86,262	17,060	43,464	7,765	1,394,639	1,102,251	30,134	2,681,575
1910	392,728	556,495	92,137	46,882	1,740,839	3,457,870	57,773	6,344,724
1913	1,073,396	888,025	221,714	578,836	3,165,704	5,303,517	352,430	11,583,622
1914	1,660,508	636,788	1,192,955	392,932	3,627,149	3,526,090	518,226	11,554,648

The enormous increase in 1914 of agricultural loans, especially of those repayable at fixed periods, is remarkable.

b) *People's Bank Associations.* — These associations were first established in 1907 as auxiliary organs to the Agricultural and Industrial Bank. They numbered 227 at the end of 1914 as against 208 at the end of 1913, but their total membership was 60,322 at the former and 80,193 at the latter

date. The reduction followed on the elimination of undesirable members. At the end of 1914 the capital advanced by the government was 2,265,000 yen ; that contributed by members 694,300 yen ; the reserve funds amounted to 491,289 yen (396,331 yen at the end of 1913) ; the balance of deposits to 108,521 yen ; the balance of loans to 2,148,278 yen ; the profits to 43,433 yen (91,684 yen in 1913) ; the amount of joint purchases to 96,967 yen (89,917 yen in 1913) ; that of consignment sales to 563,532 yen (889,402 yen in 1913); and the number of warehouses lent to the government to 195.

A Japanese manager of each association is appointed and paid by the government.

The new regulations recognized the limited liability of the associations and imposed upon each member the obligation of strengthening the capital fund to the extent of ten yen a share ; and, in order to encourage thrift in members, they authorized the associations to receive their deposits. The membership, hitherto limited to Korean farmers, was opened to Japanese farmers.

c) *The Activity of the Oriental Development Company.* — This company engages under government protection in agricultural and industrial undertakings. It invites skilled farmers, selected by itself, to immigrate and supplies them with necessary funds ; and thus it participates in the development of the natural resources of the peninsula. The company's capital being 10,000,000 yen, State lands — which measured 10,037.8 cho (1) — were transferred to it in payment for 60,000 shares valued at 3,000,000 yen taken up by the government. These lands, added to those bought, reclaimed or otherwise acquired by the company, made its total landed property at the end of 1914 measure 70,143 cho — 46,642 cho of paddy land, 18,753 cho of upland, 2,264 cho of forests and 2,482 cho of other land. The rents of this property amounted to more than 1,600,000 yen in 1914.

Up to the end of 1914 the company brought 2,659 immigrant families into Korea and rented to them altogether 4,733 cho of cultivated land. The government granted 300,000 yen annually to the company for its engagement of Japanese immigrants.

A main branch of its activity is the supply of the funds needed for exploitation by settlers, farmers and others. In the fiscal year 1914 (1 April 1914 to 31 March 1915) the total amount lent to farmers and others was 7,570,000 yen, which was more by 1,360,000 yen than that lent in the previous year. Of the total loans 3,220,000 yen were lent for agricultural purposes, 1,540,000 yen for public enterprises, 2,300,000 yen for debentures issued by several Agricultural and Industrial Banks, and 500,000 yen for other purposes.

The following table shows the position of the company in 1913 and 1914 :

(1) 1 cho = 2.44959.

Year	Reserve Fund	Debentures Issued	Profits	Amount of Dividends	Percentage of Dividends
	yen	yen	yen	yen	
1913	428,400	19,350,000	1,391,400	690,000	7.0
1914	511,000	19,350,000	1,047,841	650,000	6.5

§ 2. GROWTH OF AGRICULTURAL PRODUCTION.

The organizing energy of Japan has given a strong impulse to the activity of Korea. The fact is proved by the figures having regard to foreign trade, which increased in amount from 39,207,031 yen (8,902,509 yen for exports and 30,304,522 yen for imports) in 1906 to 108,691,682 yen (exports 49,492,325 yen and imports 59,199,357 yen). If it be remembered that — as we have said — more than 80 per cent. of the foreign trade is in agricultural products, the increase in agricultural production is seen to have been considerable.

The activity of the Oriental Development Company, the wise organization of small credit, technical education, the formation of small farms, experimental stations and nurseries for mulberry and other trees, the formation of Water Utilization Associations (1), the holding of agricultural exhibitions — all these elements have contributed to the progress made. Much however remains to be done for at the end of 1914 only about 13 per cent. of the land of the peninsula was cultivated. Measures have therefore been taken to extend the cultivated area. Between 1907 and the end of 1914, 29,198 cho of State waste land were granted to individuals or corporate bodies.

The following table shows the progress made between 1910 and 1914 :

Product	1910	1914
Rice (1)	7,917,622 koku (2)	12,159,167 koku
Wheat and barley	3,548,441 "	6,001,839 "
Beans	2,473,679 "	3,229,170 "
Millet	2,646,890 "	3,212,464 "
Cotton	11,473,170 kin (3)	36,123,530 kin
Cocoons	13,931 koku	46,194 koku
Cattle	703,844 head	1,338,401 head

(1) In order to improve the quality of the exported rice, regulations issued in February 1915 provided for its inspection and subsequent classification.

(2) 1 koku = 0.6205 quarter.

(3) 1 kin = 1.32 lbs.

(1) There were at the end of 1914 nine of these associations, of which seven had up to that date spent more than 1,189,000 yen, while the area having a water supply had been increased by 10,407 cho.

The government has devoted particular attention to the protection of forests. Jurisdictional districts for forest protection have existed since 1912 and there were forty-five of them in the different Korean provinces at the end of 1914.

No less an effort has been made in the direction of afforestation. The nurseries formed by the central or provisional governments provided 3,573,837 seedlings of *quercus serrata*, pseudo acacia, red pine, poplar (*pyramidalis*) chestnut and other trees; and 14,570,000 of them, as well as 137 koku of seeds, in 1914.

Afforestation is also undertaken by private corporations or individuals. Thus the Oriental Development Company planted 2,860,000 trees in the spring of 1914.

Finally an annual Arbour Day has been instituted and is duly celebrated, especially in the schools.

The following table shows the progress of afforestation :

Means of Afforestation	1910		1915	
	Area afforested	Number of Trees planted	Area afforested	Number of Trees planted
By Central Government . .	531 cho	876,000	183 cho	1,460,000
By Local Governments . .	—	—	251 "	1,329,000
By Public Schools	—	—	938 "	3,810,000
On Arbour Day	—	—	—	15,384,000
By Private Individuals and Corporations	404 "	1,947,000	18,686 "	39,399,000

Thus in 1910 an area of 1,035 cho was afforested with 2,823,000 trees and in 1915 an area of 20,058 cho with 61,382,000 trees. In the whole period 1910-1915 the afforested area was 69,761 cho and the number of trees planted 235,351,000.

NOTICES RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

AUSTRIA AND HUNGARY.

FEIFALIK (Dr. F.) [Regierungsrath der bosn. herz. Ländersverwaltung] Ein neuer aktueller Weg der Lösung der bosnischen Agrarfrage (*A New Way to solve the Agrarian Question in Bosnia*) Wiener Staatwiss., Studien II Band; 3 uf. Vienna and Leipzig, 1916.

In this book the author has aimed at contributing to the solution of an agrarian and economic problem in Bosnia, the problem namely of the *kmeti* which is important because it is connected with the development and future of agriculture in this province but which is thorny because multiple difficulties are in the way of its solution.

The name *kmeti* is given to the cultivators of the lands possessed by the *agas* who are the great proprietors of the country. These lands are burdened by a right of customary service, recognized by the law, in virtue of which a *kmet* can never be deprived of the land he renders fruitful by his labour, and is connected by certain obligations with the *aga* to whom the land belongs. There are thus in Bosnia and Herzegovina special jurisdictional relations between proprietors and cultivators of the land, and they date from a very ancient period. The regulation of these relations is no very easy task and has always preoccupied the Austrian and Hungarian administration. The realization of pertinent reforms which would solve the agrarian problem, with which the problem of the *kmeti* is intimately connected, has figured importantly ever since the early period of occupation in the general economic and agrarian programme which Austria and Hungary have proposed to carry out in the new territories.

Dr. Feifalik has understood the importance of the matter at stake and has wished not only to facilitate its investigation, by the opportune and practical observations which make his book useful and valuable, but also to render a practical service in that he advances a new solution of the agrarian problem, especially as it concerns Bosnia. In his three first chapters he attempts to show:

a) That the feudal relations which have long existed in Bosnia and Herzegovina between the *agas* and the *kmeti* represent an insurmountable obstacle to all improvement in agriculture, which has for this reason made no progress since the time of the Austrian and Hungarian occupation until to-day, in spite of all the ameliorative measures evolved and applied by the new government.

b) That all the essays of Austria and Hungary to improve agriculture in the two annexed provinces, including the last law of 1911 on the repurchase of lands, have had no results or hardly any, because they did

not in the first place provide for the regulation of the jurisdictional relations between the *agas* and the *kmeti*, that is between those who own the land and those who make it fructify by the labour of their hands.

This assertion of an undeniable fact gives the author a basis for his statement that the complex and difficult problem of the improvement of agriculture in Bosnia and Herzegovina can be solved in one way only, namely by seeking to reconcile the interests of the *agas* and the *kmeti*, by having recourse to more opportune and more practical reforms.

Dr. Feifalik observes that the rights which the *agas* and the *kmeti* respectively claim on the same holding constitute a species of *condominium* which is injurious not only to these two classes of citizens, whose interests are in consequence continually opposed, but also to the future of agriculture in the country.

The author thinks however that in order to untie these feudal bonds and dissolve the jurisdictional relations, which now unite the cultivators and owners of the soil in Bosnia and Herzegovina, the idea should be abandoned of granting to one or other of them the right to redemption from this servitude, which both, from the point of view of their opposing interests, consider particularly prejudicial to themselves. For this idea Dr. Feifalik proposes to substitute another and more practical plan which promises better results, that is the division of every holding between the owning *aga* and the cultivating *kmeti*. This division could not however be arbitrary : it would have to be effected under the protection of the law and in accordance with criteria for safeguarding, as equitably and exactly as possible, the interests of either party with due regard to their respective rights.

The term *ciflic* designates, when applied to land, holdings of which the *agas* are jurisdictionally recognized to be owners and the *kmeti* to be cultivators, that is holdings over which the two classes exercise their respective rights, a condition which is tantamount to the existence of a species of *condominium*.

By the law of 1911 the Austrian and Hungarian government proposed to solve the agrarian problem in Bosnia and Herzegovina by a definite rupture of the jurisdictional and feudal relations which had existed from time immemorial between the *kmeti* and the *agas*. But Dr. Feifalik thinks this measure inadequate to a really useful and practical solution of this important problem, and he proposes that the government should instead support a division of the landed property between the two classes of persons interested in it, the *agas* and the *kmeti*.

The author points out that the one difficulty which must be overcome before this proposal is applied if conflicts of interests are not to be provoked, that is if the respective rights of the *agas* and the *kmeti* are in no way to be injured, is the difficulty of finding what he calls the *key* to a just division of the land on the lines indicated, in other words a principle which will give a sure basis for determining, as exactly as possible, what part of a given area of *ciflic* land, taken as a unit, should be assigned to the owning *aga* and what part to the cultivating *kmeti*.

The author states that if we admit for the moment that such a key

can effectively be found the logical consequence is that the *aga* and the *kmeti* would willingly accept the proposed reform and immediately come to an agreement for the sharing of the lands in which they claim rights.

Basing his argument on this consideration, Dr. Feifalik goes on to explain the procedure to be adopted for the establishment of the key-principle of which we have spoken and which is of capital importance to the solution of the problem in question.

The better to define his ideas he supposes the particular case of a *ciflic* holding having an area of 60 *dunum* (1). He states that the various crops grown on land of this area can bring in a gross revenue of 600 crowns (2), from which however the tax of the tithe has to be deducted. The remaining revenue is divided, one third going to the *aga* and two thirds to the *kmet*. The gross value of the products are thus shared as follows:

Ciflic Holding of 60 dunum.

The tax of the tithe	60	crowns
To the <i>aga</i> ($\frac{1}{3}$) :	180	»
To the <i>kmet</i> ($\frac{2}{3}$)	360	»
Total	600	»

It should next be imagined that this holding of 60 *dunum* is not *ciflic* as was presumed when the preceding figures were established. Let the holding be supposed to be freely and absolutely owned by the *aga* who grants it to a *métayer*. The author believes that the revenue to be derived from it in such conditions, everything relevant to a contract of the sort being taken into consideration, is indicated by the following formula:

$$(1) \frac{600-60}{2} = 270 \text{ crowns.}$$

Take another hypothesis. Suppose that the holding in question, while the form of its tenure is still that of free proprietorship, has an area of only 40 *dunum* (3). The revenue to be derived by the *aga* is then represented as follows:

$$(2) \frac{400-40}{2} = 180 \text{ crowns.}$$

These formulae show that the revenue derived by the *aga* from *ciflic* land having an area of 60 *dunum* is equal to that of a holding of only 40 *dunum* which he holds in free ownership. The ratio which should obtain between an *aga's* share and the whole area of any *ciflic* holding subjected to the proposed division, is therefore expressed as follows:

$$40 : 60 = 2 : 3.$$

(1) 60 *dunum* = 136.90005 acres.

(2) 1 crown of gold = 10.08096 *d.* at par.

(3) 40 *dunum* = 91.2667 acres.

That is to say two thirds. It is therefore permissible to claim that the *aga* ought to be satisfied even if after the proposed division of his *ciflic* land not the whole two thirds of its area, to which he would have a right according to the preceding calculation, but a slightly less extent were assigned to him, say three fifths of the total area. The author states that the *aga* would be inclined to relinquish this small part of his rights in consideration of the special advantage he would derive from the division of his *ciflic* land. He would indeed be enabled by the division, which would make him a free proprietor, to emancipate himself from the numerous annoyances and difficulties which are often enough caused by the *kmeti* of Bosnia and Herzegovina.

To give an idea of them it is enough to say that a *kmet* who is ill disposed to his *aga* can wrong him in a very simple way, by neglecting, for instance, the ordinary tilth of a larger or smaller part of the *ciflic* holding and employing it as pastureland for the raising of live stock. The cause of the loss which the *aga* thereby incurs is the fact that the latter has the right to take one sixth of the crops of the land entrusted to his *kmet* but has no part whatever in the profits of land left as pasturage or in the profits of keeping live stock. And this is not the only method by which the *kmet* can cause annoyance. In such cases the law certainly gives the right to take out a penal action against the *kmet* but in practice this expedient is too little efficacious for the *aga* to count upon its success. It is clear therefore that the author is logically justified in prophesying that the *agas* will receive the new agrarian reform he proposes with favour.

Another of his statements is justified also, the statement that every *aga* ought to be inclined to agree to the assignment to himself in free proprietorship of only three fifths of the total area of his *ciflic* land, instead of the two thirds to which he would actually have a right when the aforesaid division of the holding was made.

We must add that an identical double prophecy can be made in the case of the *kmeti*. To prove this statement the author employs an argument like that used in the case of the *agas*.

We have already had occasion to note that the *kmet* has a right to two thirds of the value of the products of a *ciflic* holding, after the amount of the tithe has been subtracted from such value. The profits accruing to the *kmet* from a holding of 60 *dunum* are therefore expressed by the following formula :

$$(3) (600-60) \frac{2}{3} = 360 \text{ crowns.}$$

Let us now suppose that a holding of only 40 *dunum* is ceded to the *kmet* in full ownership. The profits he will derive from it are expressed by the following formula :

$$(4) (400-40) \times 360 \text{ crowns.}$$

In other words, it may be deduced from formulae (3) and (4) that when a given holding is divided two thirds of its total area will accrue to the *kmet*.

Therefore an *aga* will have, equally with his *kmet*, a right to two thirds of the *ciflic* holding on which both have claims. Having established this circumstance the author points out that the *kmet* might very well also, like the *aga*, content himself with three fifths of the holding instead of the two thirds which would fall to him in the manner described. The small loss he would thus suffer would be outweighed by a special advantage. For before the exemplified division of the *ciflic* holding of 60 *dunum* he would be obliged to bear the expense of cultivating land of that extent; whereas after such division he would, as has already been explained, have a free property of an area of only 40 *dunum* and the costs of his farming would be proportionately diminished.

After all that has been said it is easy to understand that the author has been able to establish, on the basis of an exact principle, the following formula which gives the desired *key* to a just division of *ciflic* lands between the *aga* and the *kmeti*

$$\frac{3}{5} + \frac{3}{5} = 1 \frac{1}{5} (1).$$

This formula signifies, translated into ordinary language: 1) that the area which either an *aga* or a *kmet* would have the right to hold in free proprietorship is represented by three fifths of the total area of a *ciflic* holding; 2) that this holding should therefore receive an addition equal to one fifth of its area.

The question therefore arises — Who should furnish at the time of the division of a *ciflic* holding this missing fifth which is necessary to equity? The author answers unhesitatingly that it is the part of the State to intervene and provide the needed territory. He affirms that such intervention is possible because the State possesses in Bosnia and Herzegovina large extents of land which now yield hardly any profit. Such are indeed the 571,635 hectares (2) which are used only for the pasturage of live stock and the other 212,700 hectares which are overgrown with woods and bushes. The State is therefore fully able to provide the 94,346 hectares which would, according to the author, allow the proposed agrarian reform to be applied without injury to any private interests.

The author adds that the reform should include the preservation of the emancipated properties from too great subdivision, especially those of them which would fall to *agas*. The better to attain this end the *agas* and the *kmeti* should be encouraged to accept this second part of the projected reform by the grant of an amount of land somewhat in excess of that to which they really would have right. Therefore the author proposes that

(1) It should be noted that the author in establishing this formula has not taken into account:

a) that the value of the products belonging to the *aga* is a net value while that accruing to the *kmet* is a gross value;

b) that in speaking of the division of the products between the *aga* and the *kmet* the reference is to the principal products of the soil whereas the secondary products (of the vegetable garden, orchard etc.) and the profits derived from stock raising accrue to the *kmet* only.

(2) 1 hectare = 2.47 acres.

the State should cede not only the 94,346 hectares already mentioned but double that area, namely 188,692 hectares, the value of which may be computed, according to the prices usually paid to the State by settlers acquiring land, as 2,075,612 crowns.

The author then proposes that the application of the projected reform should not be obligatory but that the *agas* and the *kmeti* should have full liberty to accept or reject it. It is however his opinion that both will receive it favourably, for the simple reason that the proposed division of lands will be useful to both. This result would, he says, be reached far more easily if the State declared itself ready to cede a part of its property to the *agas* and the *kmeti* on condition these were in their turn ready to accept the application of the agrarian reform in question at a given moment, that is to say before the special laws called *Baltalik* and *Mezzas*, which have reference to the cession of State lands to the communes, were applied.

This impulse given by the State would, Dr. Feifalik affirms, contribute to an unhesitating acceptance on the part of the *agas* and the *kmeti* of a reform which would be of general service. It would, as has already been said, be optional. But while Dr. Feifalik maintains the usefulness of leaving to the *agas* and the *kmeti* full liberty to accept or reject the proposed reform, he is of opinion that there are exceptional cases in which the State would have to compel the division of the lands on the lines indicated, even having recourse sometimes to measures of force.

These cases are the following :

1) When a minority among the *kmeti* depending on a single *aga* opposed their majority who wished to accept the aforesaid proposed agrarian reform. The author maintains that in this case the State should impose the aforesaid reform on all the dissenting *kmeti*, especially if the lands cultivated by the latter were so situated in relation to those cultivated by the *kmeti* favouring the reform that they would be an obstacle to its application. It is the author's opinion that in the case of an obstinate opposition on the part of these dissenting *kmeti* the State should compel them to migrate to other localities.

2) The second exceptional case would occur in the districts of Bosnia and Herzegovina within the war zone. The author advises that the State should reserve the right within the war zone to render the application of the agrarian reform obligatory where there seemed to be a need for it and also to have recourse to coercive measures where, for example, there was question of expropriation or other such action.

Proceeding to consider the territorial distribution of the State's landed property the author remarks that the State domain, although in general rich in land, is insufficient in the eight districts which border the Save. Where these districts are concerned he proposes to compel the *agas* to cede the lands they possess in exchange for others lying in regions where the landed property of the domain is more considerable or even excessive. Should the *agas* in question oppose this plan the author proposes simply that the law relative to the repurchase of lands should be applied to these districts.

Before concluding we must state that Dr. Feifalik's ideas and the reform he proposes, as resumed by us, refer especially to Bosnia. Since in Herzegovina the jurisdictional relations between *agas* and *kmeli* are slightly different from what they are in Bosnia, the author has wished to make the former province the subject of a special study in which he hopes to present his conclusions regarding it.

AUSTRIA.

AGRAR-COMPASS. JAHR- UND ADRESSBUCH DER ÖSTERREICHISCHEN LAND-WIRTSCHAFT (*Agrar-Compass. Year-book and Directory of Austrian Agriculture*) Published by Rudolf Hanel, Vienna, 1916, pp. 1788.

There were already books like this one in Austria concerned with industry and commerce. The present volume fills a gap and supplies a need much felt not only by agriculturists but also by all interested in business, and is a potent aid to the general economy of the country. For in spite of the great progress made by co-operation and the existence of other noteworthy institutions, Austria has lacked the means by which a complete idea of the market in a broad sense can be formed, and the connection between consumers and producers has had a casual rather than a systematic character. This has been largely due to the fact that agriculture has lacked the expedient which had long and successfully served industry. The editors of *Agrar Compass* have made it their aim to understand and explain agricultural production in all its branches from the point of view of its capacity to enter into the movement of commerce. The new directory deals especially with those agriculturists who bring onto the market a quantity of products considerable from the commercial point of view. The war prevented this collection of addresses from comprising those of the agriculturists of Galicia and Bukovina, in which countries ownership has undergone many and important changes and modifications.

The book gives the names and addresses of the owners of farms and forest holdings, and of their secondary establishments when these surpass an area fixed in accordance with the crops grown; of the dairy farms — those producing milk and cheese and collective dairies —; of agricultural unions for purchase, sale and stock-breeding and other co-operative societies and corporations; of distilleries, mills, industries for working with wood, sugar refineries, factories for making preserves and substitutes for coffee, and tobacco industries.

Pages 1221 to 1268 are occupied by general statistics giving the data as to the agricultural, economic and forestal position in each State, that is with regard to agriculture, forestal economy, stock-breeding, the industries for alcoholic drinks, mills, and the treatment and preparation of wood, sugar, preserves, coffee substitutes, and tobacco.

RUGGERI ALFREDO, gerente responsabile

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXIX.
8TH YEAR: NUMBER 7
JULY, 1917.



ROME
PRINTING OFFICE OF THE INSTITUTE
1917

THE INTERNATIONAL INSTITUTE OF AGRICULTURE

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Part I: Co-operation and Association

BULGARIA.

THE CENTRAL CO-OPERATIVE BANK OF BULGARIA.

SOURCE:

Отчетъ на българската централна кооперативна Банка за 1914 година. (*Report of the Central Co-operative Bank of Bulgaria for 1914*). Sophia 1915.

This bank was formed by the law of 17 December 1910 (old style) and became active on 18 March 1911. Its offices are at Sophia; the branches of the National Bank and the Agricultural Bank serve as its representatives and correspondents in other parts of the country.

The Central Co-operative Bank of Bulgaria has the three following objects:

- 1) It is the clearing-house of the co-operative associations, that is to say that such of them as dispose temporarily of abundant funds place these in the Central Bank which uses them for the purpose of affording credit to the co-operative associations which lack means.

- 2) It grants long and short-term credit out of its own capital to co-operative associations.

- 3) It inspects co-operative associations.

Its objects show that it is intended to discharge in relation to the co-operative societies functions previously exercised by the National Bank or the Agricultural Bank; but since the by-laws of the two latter have not changed, all three banks at present exercise the same functions, although it is hoped that in the future those of the Central Co-operative Bank will be separated from those of the other two.

In addition to these functions the Central Bank is charged on commission to perform certain services on behalf of the Institute of Insurance, namely to receive premiums and pay insurance sums.

According to the law (article 8, pages 9 and 10) the Central Co-operative Bank is authorized to keep general stores and organize public sales and purchases on behalf of its members, but hitherto it has not availed itself of this right.

The members of the Central Co-operative Bank are of two kinds :

a) the National Bank and the Agricultural Bank are by the law (article 3) obliged to pay a total contribution of 5,000,000 francs (2,500,000 each) and are designated founder members ;

b) the co-operative societies and their federations are authorized to have themselves registered as ordinary members, so long, of course, as they pay the subscriptions prescribed by the law.

The co-operative societies are *direct* ordinary members if they register without the intervention of the district federations, *indirect* ordinary members if it is the federation to which they are affiliated which is registered. Co-operative societies belonging to a federation registered as an ordinary member, and therefore themselves indirect ordinary members, may not also be registered as direct ordinary members.

Ordinary members are obliged to pay subscriptions. If they are themselves ordinary members co-operative societies are obliged to subscribe for at least two shares of 100 francs each, while a district federation is obliged to subscribe for at least one share for each co-operative society affiliated to itself.

Besides its own capital the Central Co-operative Bank uses capital which it procures 1) by receiving deposits, 2) by rediscounting its paper, and 3) by issuing long-term bonds redeemable on drawing lots. The issues of bonds have to be covered not only by the bank's credit but also in the proportion of 10 per cent. by the bonds fund.

The bonds fund was formed by the founder members and is fixed by the law at one million francs.

The Central Co-operative Bank is superintended by the Ministry of Finances.

At the end of 1914 the Central Co-operative Bank had in addition to its founder members, who are the National Bank and the Agricultural Bank, 644 ordinary members, namely :

575	rural funds ;	
27	popular banks	
24	co-operative producers'	societies
12	" consumers'	"
3	" limited liability credit	"
2	" purchase and sale	"
1	" stock-farming	"
<hr/>		
644		

A comparison with the figures of the preceding year shows that the membership had increased by ninety-five.

The business of the Central Bank from its foundation until the end of 1914 is shown by the following tables :

TABLE I. — *Assets.*

	1911 fr.	1912 fr.	1913 fr.	1914 fr.
1) Current accounts on 5-year bonds	—	2,203,910.67	4,531,316.52	8,857,434.29
2) Bills	1,656,729.57	4,408,764.01	3,474,102.62	2,778,789.85
3) Current accounts bearing interest.	509,190.88	706,822.43	2,469,687.98	1,799,776.19
4) Currents accounts without interest (1)	3,321,138.65	355,337.02	224,115.88	171,126.56
5) Current accounts opened on deposit of State securities . . .	—	—	6,626.35	14,923.87
6) Paper	176,420.01	315,009.85	82,325.15	14,917.33
7) Loans on pledged agricultural products and machines . . .	—	—	50,000.00	70,233.05
8) Long-term loans.	179,350.00	111,435.85	59,128.85	3,273.85
9) Securities guaranteeing issues of bonds	529,000.00	529,000.00	552,500.00	552,500.00
10) Deposits to be received	—	—	—	905,964.12
11) Bills to be received by correspondents.	115,481.75	1,752,447.25	2,758,291.09	446,029.90
12) Bills on deposit	3,198,894.38	5,191,865.69	2,575,130.71	3,264,275.85
13) Payments not yet made by ordinary members (capital not called up).	62,343.10	56,992.10	33,299.43	11,797.50

(1) Unpaid-up capital of founder members.

TABLE II. — *Liabilities.*

	1911 fr.	1912 fr.	1913 fr.	1914 fr.
1) Capital of the founder members .	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00
2) Capital of the ordinary members .	88,600.00	111,700.00	114,800.00	129,000.00
3) Reserve fund.	—	—	10,448.50	56,948.05
4) Bonds fund	1,000,000.00	1,000,000.00	1,010,448.50	1,056,948.05
5) Term deposits:				
a) capitalized interest	73,794.00	1,761,110.55	2,453,561.26	2,711,637.60
b) non-capitalized interest . . .	31,232.00	35,848.35	1,059,563.63	1,065,538.55
6) Deposits at sight.	502,445.66	1,193,704.55	2,128,849.68	4,659,512.29
7) Deposits of bills	3,290,217.03	6,805,329.94	5,258,453.00	4,603,455.37

TABLE III. — *Receipts and Expenditure.*

	1911 fr.	1912 fr.	1913 fr.	1914 fr.
EXPENDITURE.				
<i>I. — Section of credit.</i>				
1) Salaries of employees	82,995.05	109,485.64	95,254.36	149,591.48
2) Compensation to members of the administrative and super- intending council	280.00	260.00	1,800.00	3,113.80
3) Dividends to members	2,542.42	13,462.51	7,521.66	27,815.35
4) Interest on deposits	15,551.62	68,420.59	131,655.98	344,047.35
5) Redemptions	—	103,527.91	17,325.28	21,351.49
6) Other expenditure	23,657.56	31,574.81	101,894.63	49,627.39
<i>II. — Section of insurance.</i>				
1) Salaries of employees	22,888.01	41,571.79	56,204.99	105,873.25
2) Other expenses	16,094.12	13,675.64	13,862.37	26,170.83
RECEIPTS.				
1) Interest on current accounts . .	27,028.51	354,810.74	461,835.84	708,083.46
2) Discount of bills and bonds at 5 years	6,081.32	27,729.95	25,880.19	10,538.37
3) Interest on long term loans . .	6,680.17	9,015.54	5,949.34	—
4) Income from securities (1) . .	26,582.15	26,582.05	27,763.13	74,055.33
5) Commissions received by the institute of insurance	12,240.95	64,217.84	78,730.14	95,782.21
6) Various receipts	353.80	9,207.80	1,647.89	57,840.33

(1) Coupons received..

As compared with the business of the preceding years that of 1914 shows a marked difference in the point of the current accounts opened on five-year bonds. This item increased during the second half of 1914. The bank's debtors, who usually pay their debts in autumn, after the harvest, did not pay them in this year owing to the financial position brought about by the European war.

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* *

At much the same time as the law regarding the foundation of the Central Bank another was passed as to the insurance of agricultural products

and cattle (26 December 1910). By this law there was created a State institute of insurance of which the financial management, namely the reception of premiums and payment of insurances, was by article 19 entrusted to the Central Bank, which formed for such purpose a special section called the insurance section.

Previously to this law, in the years from 1896 to 1903, the insurance of agricultural products was effected by the State itself in accordance with the law of 20 December 1895. This insurance was compulsory in the case of all lands excepts prairies, forests and tobacco plantations. The owners of the lands subject to insurance were obliged to pay, as insurance premiums, a tax equal to 5 per cent. of the land tax. On lands exempted from the land tax a special and equivalent tax was paid. The fund formed by the insured was increased by State grants at the rate of 500,000 francs a year.

If the premiums paid by the insured and the State grants did not suffice to compensate for all damages caused by hail the amount of the indemnities was reduced.

The working of this institute did not give satisfactory results. The losses due to hail in the years from 1896 to 1903 were valued at 40,275,500 francs while the premiums paid by landowners amounted only to 7,560,370 francs and the State grants to 4,000,000 francs.

The indemnities to be paid were therefore reduced by 75 per cent. and the insured received only 10,636,275 francs instead of 40,275,500 francs.

The law of 1895 was repealed in 1904; and on 26 December 1910, after long study, the new law was passed as to the insurance of agricultural products against hail and the insurance of cattle.

The principles of this law as regards insurance against hail are the following:

The insurer is the State itself. The insurance is optional, every farmer having the right either to insure or not. The fund needed for the payment of indemnities is made up of premiums paid by the insured and State grants. The State pays into this fund once for all 1,000,000 francs as a foundation capital, and also 500,000 francs a year (article 12). The premiums to be paid by the insured are fixed by a special commission composed of State employees and of the insured. They vary with crops, the position of lands, yield, risks, etc. The year begins on 1 March and ends on 28 or 29 February. Premiums may be paid up to the end of September.

Premiums are fixed: when once they have been established at the beginning of the year they cannot be increased or diminished. If the total amount of the premiums and the State's annual grant exceeds that of the losses caused by hail the excess is appropriated to the reserve fund. If on the other hand this amount is insufficient to compensate the insured to the extent of at least 80 per cent. of their losses the needed sum is taken from the reserve fund, until this has been reduced by 50 per cent., when any further sum required is obtained as credit from the Agricultural Bank (article 13). Such calls may not however be made upon the Agricultural Bank if a debt previously contracted has not been extinguished. In point of fact

the institute of insurance has hitherto had sufficient means of its own and has not therefore exercised this right.

The insurance of cattle is quite different. It follows the principle of mutuality. Insurance societies have been formed in the villages, and the State merely acts as reinsurer (article 2).

The insured pay their premiums to their society which pays one per cent. of the sum insured to the State as a reinsurance premium. The insurance fund is increased by the grants made by the State, namely 500,000 francs once for all and 100,000 francs a year.

The insurance year begins on 1 November and ends on 31 October (article 16).

The insured are compensated for their losses half by the State and half by their respective societies, but the half due from the societies is advanced to the insured by the State.

If the compensation falling to be paid by the State surpass the amount of the reinsurance premiums and the annual grant, the insurance societies are obliged to pay a supplementary reinsurance premium to the State (article 8). Such payment is made by the method of distribution.

The Central Bank is responsible for the financial management of this system of insurance: it receives the reinsurance premiums and the State grants and pays the estimated amount of losses to the insured, taking commission of from 3 to 10 per cent.

The insurance business from 1911 to the end of 1914 is shown by the following table:

TABLE IV. — *Insurance against Hail.*

Year	Total number of the insured	Insured value	Premiums paid	Number of cases of loss	Estimate of losses	Indemnities paid
		fr	fr		fr	fr
1911.	3,444	6,120,490	134,864.90	517	126,974.10	126,974.10
1912.	17,548	28,255,390	630,779.70	2,527	1,037,726.10	1,037,726.10
1913.	25,026	39,326,400	921,182.00	3,993	869,761.20	869,761.20
1914.	30,316	37,101,420	1,181,573.80	6,292	1,623,960.20	1,623,960.20

The business of 1914 is represented by the following table:

TABLE V. — *Lands Insured against Hail.*

	Area insured	Value insured	Premium paid	Area injured	Indemnity paid
	hectares (1)	fr	fr	hectares	fr
Wheat	68,699.11	18,633,490	367,061.60	3,893.53	308,457.50
Mealin	2,598.25	630,890	17,813.—	433.51	25,924.10
Rye	5,260.03	1,063,460	21,181.—	219.30	13,156.90
Barley	2,466.97	2,782,740	56,209.90	440.68	27,128.10
Oats	6,292.13	1,128,970	25,920.90	908.08	44,132.70
Maize	12,936.40	2,810,950	27,974.10	687.50	37,730.60
Other cereals	691.75	218,210	4,917.60	29.53	1,820.80
Haricot beans	517.04	150,520	3,225.20	37.87	2,814.90
Vetch	2,134.48	526,640	11,744.—	154.48	8,128.40
Other vegetables . . .	245.60	31,110	757.20	7.39	433.10
Colza	501.17	166,290	3,299.50	17.05	2,262.40
Tobacco	248.18	254,420	16,733.40	25.93	6,045.80
Other industrial plants	102.40	38,380	958.30	9.35	2,129.40
Garden crops	127.57	80,810	3,995.50	8.27	2,893.10
Roses	82.57	88,760	1,032.20	—	—
Vines	4,965.48	8,243,190	616,692.50	1,746.46	1,135,345.50
Natural and artificial prairies	437.29	77,140	550.20	12.28	797.60
Other cultivated lands	277.08	181,450	3,575.70	21.31	3,859.30
Total . . .	118,462.49	37,101,420	1,183,420.—	8,652.52	1,623,960.20

(1) 1 hectare = 2.47 acres.

TABLE VI. — *Insurance of cattle.*

Number of insurance societies	34
Number of members	629
Heads of cattle insured	2,332
Value of insured cattle	frs 385,157
Number dead	54
Indemnities paid	» 3,389.75
Premiums fixed in advance	» 3,296.79
Supplementary premiums	» 73.45

ITALY.

THE NATIONAL INSTITUTE OF CREDIT FOR CO-OPERATION, THE INSTITUTE OF CREDIT FOR CO-OPERATIVE SOCIETIES AND THE NATIONAL BANK OF ITALIAN RURAL FUNDS IN 1916.

SOURCES :

ISTITUTO NAZIONALE DI CREDITO PER LA COOPERAZIONE. Assemblea generale ordinaria dei partecipanti tenuta in Roma il 30 marzo 1917. Anno terzo (*National Institute of Credit for Co-operation. Ordinary general meeting of members held at Rome on 30 March 1917. 3rd year*) Rome, Casa editrice italiana, 1917.

ISTITUTO DI CREDITO PER LE COOPERATIVE. Relazioni e bilancio approvati dall'Assemblea degli azionisti del 5 Aprile 1917. XII esercizio (*Institute of Credit for Co-operative Societies. Report and balance-sheet approved by the shareholders' meeting of 5 April 1917, 12th year*). Milan, Tipografia degli operai, 1917.

BANCA NAZIONALE DELLE CASSE RURALI ITALIANE. Resoconto per il 1916. 2° esercizio. Relazione del Consiglio di amministrazione e dei sindaci all'assemblea generale ordinaria dei soci in Roma, 18 marzo 1917 (*National Bank of Italian Rural Funds. Account rendered for 1916. 2nd year. Report of the council of administration and the accountants to the ordinary general meeting of members in Rome. 18 March 1917*). Rome, Prem. Tip. Litografia V. Ferri, 1917.

In Italy the co-operative societies procure the credit necessary to their activity from various sources — popular banks, ordinary savings banks, federations of co-operative societies having banking functions, etc. — and also from the three institutions specially created for them named in the title of this article : the *Istituto Nazionale di Credito per la Cooperazione*, founded at Rome in 1913 by the free collaboration of the greatest Italian institutions of credit and thrift, the *Istituto di Credito per le Cooperative*, founded at Milan in 1904 on the initiative of the *Società Umanitaria*, and the *Banca Nazionale delle Casse Rurali Italiane*, formed recently, in 1915. The reports lately published as to the activity of these institutions in 1916 allow an idea to be formed of their object and importance.

§ I. THE NATIONAL INSTITUTE OF CREDIT FOR CO-OPERATION.

The reader will recall (1) that this institution was promoted by the Ministry of Agriculture, Industry and Commerce in a special meeting which it held on 9 June 1913 jointly with the National Thrift Fund for the Inva-

(1) For the origin and organization of the Institute see our issue for December 1913.

lidity and Old Age of Workmen (1), the Milanese Institute of Credit for Co-operative Societies and a group of ordinary savings and popular banks. The National Institute of Credit became a moral person in virtue of a royal decree of 15 August 1913 (no. 1140) and now has a capital of 8,200,000 liras furnished by thirty-nine societies or establishments which it includes. Its object is to afford credit to the co-operative societies of various kind and their consortia, both being legally constituted. With such object it undertakes the following business: *a*) it discounts for co-operative societies and their consortia bills having two signatures of qualified and solvent persons; *b*) in exceptional cases, precautions being taken by the council of administration, it makes direct advances to co-operative societies on the bills they have accepted; *c*) it grants advances on bills for work, accepted bills, mandates of public administrations and the credit they afford; *d*) it grants loans and advances to co-operative institutions on the pledge of securities of known safety or, in general, when the council of administration has established guarantees and taken precautions; *e*) it makes recoveries and payments on behalf of the co-operative societies, the societies of mutual aid, etc. and serves them generally as a bank; *f*) it rediscounts the bills ceded to it, opens current liability accounts, accepts deposits from co-operative societies and issues bonds bearing interest and maturing at fixed dates.

On the 30th of last March the ordinary general meeting of the societies belonging to the National Institute was held and the report of the council of administration on the Institute's activity, in the year which had closed, in favour of the national co-operative movement was read. From this report it is learnt that in spite of difficulties resultant on the state of war, which react in particular on the labour organizations, the co-operative societies which had relations in 1916 with the Institute, either directly as clients or indirectly by means of the consortia of the federations they represent, number 1,493, comprise 386,558 members and own a capital of 27,917,629 liras. Financial operations were especially concerned with the execution of works of public utility, such as the construction of school buildings, aqueducts and roads, and with works of beneficence and agriculture.

Last year the Institute accepted for discount 14,441 bills for 56,885,256.07 liras as against 12,582 bills for 42,802,768.57 liras discounted in 1915. The increase was therefore one of 1,859 bills and 14,082,487.50 liras.

If the variations in the situation month by month be regarded, the amount of business is seen to have followed an ascending line so that the paper held on the 31st of last December amounted to 18,826,334.58 liras as against 11,836,110.57 liras at the end of the preceding year, giving an increase of 6,990,224.01 liras or more than half.

Of these bills 9,782 for a total amount of 44,610,467.57 liras concern cessions of mandates; 2,375 for 3,420,208.80 liras are for commercial operations; 346 for 2,229,728.20 liras are for direct loans; 369 for 2,083,372.60

(2) *Cassa Nazionale di Previdenza per l'invalidità e la vecchiaia degli operai.*

liras are for direct loans with an agricultural privilege as to 4,218 hectares (1) of cultivated land; and 1,569 for 4,541,478.90 liras have been ceded by intermediary institutions.

The average amount of the bills was 3,496 liras as against 3,417 liras in 1915.

The credit was distributed as follows among the various forms of co-operation :

societies of production and labour and their con-		
sortia	liras	43,150,140.35
" " agriculture and their consortia. . . .	"	2,263,848.59
" " credit and intermediary institutions .	"	4,824,360.59
" " consumption and their consortia . .	"	1,841,416.61
" for building and institutions for pop-		
ular dwellings	"	3,329,409.67
" of various kinds	"	1,476,080.26

The distribution according to districts was as follows :

North	Italy	36,297,709.31	liras
Central	"	18,667,811.22	"
South	"	1,919,735.54	"

A progressive increase also affected the sum in hand, which in 1916 was 333,659,456.19 liras or 138,610,455.02 liras more than in 1915. The items of the interest-bearing current accounts, which likewise increased, were distributed as follows: *receipts* 21,743,720.53 liras in 1916 against 4,482,449.60 liras in 1915; *expenditure* 18,713,107.41 liras in 1916 against 4,016,951.03 liras in 1915; and the surplus balance at the end of 1916 was therefore 3,496,111.69 liras.

The activity of the various offices of inspection which this Institute founded in many co-operative centres also has a special importance. The National Institute of Credit for Co-operation was indeed one of the first bodies in Italy to organize a service of inspection on just principles. For this end it made special offices charged to give to their client co-operative societies such aid in the matter of administrative and book-keeping technique as they should need; and to watch over the course of the co-operative businesses and the development of the public works to which it gives financial help. These offices work successfully at Rome, Florence, Genoa, Bologna, Venice, Verona, etc. They are notably profitable both to the Institute, which is enabled by their assiduous vigilance to protect its credit as effectively as possible, and to the co-operative societies which in many cases when the call came to the colours simply entrusted their administration and technical management to them. One of them is particularly worthy of mention, the *Ufficio di Assistenza e Consulenza per le Cooperative Agricole* which

(1) 1 hectare = 2.47 acres.

was recently created in the affiliated society at Bologna in response to desires expressed at the National Congress of Agrarian Co-operative Societies, held in Milan last December (1). This aims at regulating credit for agricultural co-operation, which is destined, especially in North Italy, to have a great future when it has been completed and directed by such an organism as this office at Bologna proposes to become, one fitted assiduously and perseveringly to watch over the technique and administration of the agricultural undertakings of the consortia.

Finally this Institute's balance-sheet of 31 December 1916, that namely for its third year, contained the following as its most important items: a) Among liabilities: subscribed capital 8,200,000 liras; reserve 64,953 liras; fund for inspecting offices 10,716 liras; interest-bearing current accounts 3,496,111 liras; bonds bearing interest at fixed dates 6,797 liras; clients and correspondents 3,625,981 liras; simple current accounts 341,191 liras; rediscounted bills 8,925,837 liras. b) Among assets: in hand 274,743 liras; paper 18,826,334 liras; public bills belonging to the Institute 2,456,651 liras; balance of subscribed shares 1,840,000 liras; banks and correspondents 2,667,770 liras.

The year's net profits reached 296,728 liras, of which 63,645 liras were appropriated to the reserve fund which was thus raised to a total of 128,598 liras.

§ 2. THE INSTITUTE OF CREDIT FOR CO-OPERATIVE SOCIETIES.

This Institute, organized in the form of a limited liability society, was founded as has been said, in 1904 on the initiative of the *Società Umanitaria* and with the collaboration of the greatest popular banks and some co-operative societies. Its object is (article 3 of the by-laws) to "take part in the development of co-operative societies of production, labour, consumption and credit which profit the labourers, employees, peasants and *métayers* and the small labourer proprietors, facilitating the working of these societies by the means of credit". To this end the Institute undertakes the following business: a) it discounts for co-operative societies bills having two signatures, cheques, notes of pledges, certified notes of work, accepted bills, and mandates of public and private administrations known to be solvent; b) it grants loans or makes advances to co-operative societies on pledged securities or pledged credit or in return for the cession of mandates of public or private administrations; c) it receives deposits of savings of not less than 10 liras and pays interest on them at the rate of 3 $\frac{1}{4}$ per cent. net; it receives deposits of sums on open current account at 2 $\frac{1}{2}$ per cent. net; it issues interest-bearing bonds having fixed terms; and it makes recoveries and payments on behalf of co-operative societies, etc.

On 31 December 1916 its share capital was 1,624,500 liras made up of.

(1) See our issue for March 1917, page 30.

21,660 shares of 75 liras each distributed among 522 shareholders. On the same date the reserve fund amounted to 449,125 liras.

During 1916 this Institute effected 3,455 operations of credit with 293 co-operative societies for a sum of 24,265,927.28 liras, distributed as follows:

1919 operations with	126 co-op. societies of production and labour	liras	15,674,552.02
689 " "	78 " " of consumption	"	3,173,406.73
126 " "	10 " " for popular dwellings	"	2,741,610.79
161 " "	10 " " of agriculture	"	1,361,515.00
560 " "	69 " " of various kinds	"	1,314,842.74
<hr/> 3455 operations with 293 co-op. societies			<hr/> liras 24,265,927.28

The operations were of the following kinds:

757 operations	liras	1,307,143.02	discount of commercial bills.
669 " "		6,812,922.25	direct loans guaranteed by the cession of mandates of public administrations.
289 " "		8,392,870.98	mortgage loans.
1218 " "		5,601,627.83	advances in the form of loans.
6 " "		99,900.00	cautionary deposits.
516 " "		2,051,463.20	endorsements, guarantees.
<hr/> 3455 operations		liras	<hr/> 24,265,927.28

These operations were geographically distributed as follows:

Lombardy	655 operations with	40 co-operative societies	liras	7,680,505.85
Piedmont	344 " "	57 " "	"	2,954,921.27
Liguria	32 " "	4 " "	"	1,057,715.00
Emilia	2,230 " "	170 " "	"	7,471,638.30
Tuscany	130 " "	11 " "	"	4,151,460.99
Lazio	24 " "	6 " "	"	104,040.00
Other districts	40 " "	5 " "	"	845,645.87
<hr/> 3455 operations with 293 co-operative societies				<hr/> liras 24,265,927.28

Further on 31 December 1916 the fiduciary deposits reached the sum of 3,081,219.81 liras and the paper that of 1,491,714.61 liras. At the close of the year there was a net profit of 28,507.08 liras.

Between 1 July 1904 and 31 December 1916 this Institute, the most ancient of the Italian institutions specially affording credit to co-operative societies, effected 37,002 credit operations for a total sum of 202,273,070 liras.

§ 3. THE NATIONAL BANK OF ITALIAN RURAL FUNDS.

This bank was founded in the form of a co-operative limited liability society, its principal aim being "to furnish aid to the rural funds and other co-operative societies which have the diffusion of credit among small agriculturists as their object" (1). The bank began work on 1 January 1915 with a capital of only 125,000 liras, but it had otherwise and at a privileged rate largely insured the discount of its paper at the *Banca d'Italia* and some flourishing co-operative banks. The amount of its loans in 1915 — all of which had the form of short-term bills for four or, exceptionally, six months — was 948,829 liras. In 1916 it was 2,640,410 liras, giving an increase of 1,741,581 liras.

The method of regulating the course of business is simple. The bank knows how its adherent societies go on because they are visited by its inspector and because its manager is in touch with their management. The manager communicates to the bank's managing body his personal impressions as to the soundness of the societies, and further brings back with him from his tours a copy of the reports on the inspection of societies and all accessory forms and notes. The bank's management has special archives among which each agricultural society has or will have a place in which to store its by-laws, accounts, balance-sheets, reports, etc. On the basis of these documents and the director's report the bank's council of administration fixes the limits of the credit available for each agricultural society, either for the discount of its paper or in the form of direct loans. This credit is of course subject to periodic and extraordinary variations. The societies having such credit at their disposal need only send the bills in their portfolios or their non-acceptances to the bank in order to receive the correspondent net sum, which is sent in the form of cheques on the free banks of the *Banca d'Italia*, payable at sight and issued by the National Bank of Rural Funds.

In 1916 the savings deposits increased notably. They amounted at the end of 1915 to 49,955 liras and on 31 December 1916 to 425,327 liras.

To conclude, the National Bank of Italian Rural Funds should be judged not only on what it has been able to accomplish in such an exceptional period as that which it is now traversing, but also on what it hopes to accomplish in normal times. Its beginnings allow good hopes to be entertained of its further activity.

(1) For its organization see our issue for June 1916, page 19.

RUSSIA.

THE CENTRAL CO-OPERATIVE UNION OF FLAX GROWERS.

SOURCES :

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- MASLOV: (S.) Центральное Товарищество льноводовъ (*The Central Co-operative Union of Flax Growers*) in *Vestnik Kooperazii* (*The Messenger of Co-operation*) No. 6, Petrograd, July 1916.
- МИШАЛОВ: О кооперативномъ сбытѣ льна (*The Co-operative Sale of Flax*), in *Vestnik Kooperazii* (*The Messenger of Co-operation*), No. 9, Petrograd, December 1914.
- MASLOV: (S) Учрежденіе центрального общества льноводовъ въ Москвѣ (*The Organization of the Central Co-operative Union of Flax Growers*), in *Vestnik Kooperazii*, Nos. 9, 10, Petrograd, December 1915.
- В: Кооперативный съѣздъ льноводовъ (*The Co-operative Congress of Flax Growers*) in *Vestnik Kooperazii*, No. 7, Petrograd, September 1916.
- ***: Итоги перваго года дѣятельности центрального общества льноводовъ (*The Balance-Sheet for the First year of Business of the Central Co-operative Union of Flax Growers*), in *Vestnik Kooperazii*, No 10, Petrograd, December 1916.
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- TCHAVANOV: The Central Society of Flax Growers, in *The Russian Co-operator*, No. 1, London, December 1916.
- ***: The Co-operative Export of Flax, in *The Russian Co-operator*, No. 2, London, February 1917.
- GRINENCO: Il lino russo ed il suo posto nella produzione, nel commercio e nell'industria mondiale del lino (*Russian Flax and its Place in the World's Flax Production, Trade and Industry*) in *Monitore italo-russo* (*Italo-Russian Monitor*) No. 1, Rome, January 1917)
- ***: Производство льна за границей (*The Production of Flax Abroad*) in *Vestnik Finansov* (*The Messenger of Finances*), No. 44, Petrograd, October 1916.

The most salient fact in the history of the Russian co-operative movement in the last two years is the formation of the Central Co-operative Union of Flax Growers which groups almost all the co-operative associations for the sale of flax in European Russia.

The exceptional importance of this co-operative organization depends on the fact that flax growing is one of the most notable branches of Russian

agriculture, linen fibre standing third among articles of export while corn and wood are first and second.

Flax is grown altogether in twenty-seven provinces and of late years its cultivation has tended to become more and more important. While in the five years from 1901 to 1905 the average area under flax was 1,017,677 deciatines (1) in 1913 the area under flax was 1,099,842 deciatines. The progressive increase in the area on which flax is grown becomes more evident if the data for the years from 1901 to 1913 be examined.

TABLE I. — *Progressive Increase of the Area under Flax from 1901 to 1913.*

Year	Area under Flax. Deciatines	Total Harvest Thousands of Puds (2)	Average Harvest by Deciatine. Thousands of Puds
1901-1905	1,017,677	19,438,600	19.1
1906-1910 (average) .	1,008,270	29,008,200	28.8
1909	982,103	22,409,800	22.8
1910	968,610	19,452,600	20.1
1911	1,026,378	21,741,200	21.2
1912	1,039,305	32,455,600	31.2
1913	1,099,842	31,906,700	29.01

As appears from this table the years 1909 and 1910 showed a sufficiently marked decrease in the area under flax which resulted in the reduction of both the average and the total harvest. The lack of an organization for the sale of linen fibre aggravated the situation, and the question actually arose as to whether it would not be profitable to supersede flax by more profitable crops.

The zemstvos were the first to foster this branch of agriculture with every possible care, and they helped it by means of a series of measures. These were the following :

1) The supply of flax growers with seed of the best quality, a measure which in itself did much to increase production, for the grain of flax easily deteriorates in districts not completely adapted to this form of agriculture. The zemstvos made a provision every year in the best producing districts and resold to growers in other provinces.

2) The cleansing of the seed which usually was not only mixed as regards quality but also was mixed with grass seed, to the detriment of the quality of the flax since strong was mingled with weak seed, and to the increasing of labour since it became necessary to weed out the grass from the growing crop several times over.

3) The purchase of machines and the teaching of modern technique in treating flax.

4) A campaign against the adulteration or falsification of the product.

(1) 1 deciatine = 2.698 acres.

(2) 1 pud = 40 lbs.

In a period of hardly a few years the activity of the zemstvos notably improved flax growing. We must insist on this point in order that the full importance of the work of the Central Union of Flax Growers may be understood.

But if relatively much has been done to improve flax growing hardly anything has on the other hand been done to improve trade in this product. This necessarily impeded progress in flax growing which largely depends on the foreign sale. The linen fibre produced in Russia represents 82.7 per cent. of the world's total yield, 6,942,000 out of 7,843,000 quintals (1). So enormous a quantity cannot be absorbed even partially by Russian industry which deals altogether with only 2,080,000 quintals of the fibre. The remainder — namely 67.6 per cent. — must be exported. Thus flax growing necessarily depends on the development of foreign trade.

Until the Central Union of Flax Growers was organized trade in this product was much below the normal. The peasant grower lost a sufficiently large part of his rightful profit to middlemen, and often he was hardly able to cover the cost he had to incur in treating the fibre.

It was not until 1910 that various attempts were first made in some districts to organize the sale of flax rationally, but as usual they were isolated. Thus in the province of Emissejsk in Siberia the local administrative for interior colonization began to offer to villages producing flax its help in selling the fibre. It advanced part of the price of the flax entrusted to it by the peasants, sent this to the factories, and paid the remainder of the price when payment had been received from the factories. But the sum of which the administrative disposed for advance payments was too small — only 10,000 roubles (2) — and therefore the percentage paid in advance was too low and it could not apply its system largely. Another experiment was made in the province of Jaroslav, where four agricultural co-operative societies united to organize foreign exporting, and there were yet other experiments in the province of Pskov and elsewhere.

The experiments which succeeded were based on the co-operative principle. The co-operative societies of Villensk in the province of Novgorod and those of Zukalovsk and Gorelsk in the province of Jaroslav, which achieved a true commercial success, deserve first mention.

When the war broke out a grave crisis ensued which brought ruin to hundreds of thousands of peasant flax growers, who had previously exported about eighteen million puds of fibre a year. The situation was aggravated because a defective harvest was added to the cessation of the export trade.

The co-operative credit societies at once participated largely in the measures which tended to diminish the crisis. The fall of prices which was feared was partly prevented by the very insufficiency of the harvest, and otherwise by guaranteed advances on deposited flax made by some zemstvos, and by some co-operative societies which in this had the help of

(1) 1 quintal = 220 lbs.

(2) 1 rouble = about 2s. 1 ½ d. at par.

the Popular Bank of Moscow and above all of the Bank of the State which afforded them special credit.

The influence of these advances on prices was felt immediately. Thus in Rjevsk in the province of Vitebsk there was a rise from 25 to 52 roubles, while a less notable rise in Kovensk was of 25 per cent.

The influx of flax into the depots naturally made the co-operators think of organizing the sale. A first action taken with regard to the home market did not succeed because Russian spinners showed themselves the enemies of the co-operative movement. The only field remaining for the co-operative societies was therefore that of exportation. In order to organize this it was necessary to create a network of organizations, beginning with the local and district unions.

On 1 June 1915 eight unions composed of 107 co-operative associations had already been formed: the union of Rjevsk had 40 associations, that of Schatzk 12, that of Suschevsk 11, that of Volokolamsk 18, that of Kaschir 5, that of Tver 8, that of Setarovsk 6 and that of Betejsk 7.

A central organization which could unite these groups was lacking. In April 1915, a memorable date in the history of the Russian co-operative movement, the commission for the preparation of the by-laws of the future Central Union of Flax Growers was founded at the council of the Congress of Representatives of the Linen Industry, an organization which unites growers, traders and spinners in the defence of their common interests in the State. The commission was composed of representatives of the Committee of Rural Funds, the Popular Bank of Moscow and the co-operative associations and resolved as follows regarding the basis of the new organization: "It is the object of the Central Co-operative Union of Flax Growers to help the co-operative associations of flax growers to organize selling in the best conditions, and to buy for them seeds, manures and machines and organize more rationally the growth and the treatment of flax. Only co-operative credit societies, co-operative agricultural societies and co-operative consumers' societies concerned with the sale of flax may belong to the Central Union".

In order to become a member of this union every co-operative society must pay an entrance fee of 10 roubles and buy at least one share of 50 roubles. Each society has only one vote and liability for the union's business extends over all the property and capital of a member society.

The Central Administration of Agriculture approved these by-laws on 17 July 1915 and the new organization then became active immediately. At the outset the Central Co-operative Union was composed of 43 member co-operative associations, namely 6 district unions, 3 provincial agricultural societies and 34 other societies. On 1 May 1916 it united 163 organizations of which eleven were unions; and at the end of 1916 twenty-two unions comprised more than 400 associated co-operative societies composed of hundreds of thousands of flax growers in the flax producing districts of European Russia.

All necessary aid to exporting was given by the Popular Bank of Moscow, which had already reached good results by an experiment in working

with the two district unions of Volokolamsk and Rjevsk which exported fibre to Great Britain.

The time was unfavourable for the Central Union, for the closing of the ordinary roads of export, and the lack of transport in countries which now had to be traversed, made its task more than difficult. Public opinion received the union's first measures sceptically. Many persons, both theoretical and practical co-operators, feared that so sudden a start was premature and maintained that the co-operative system ought to be applied gradually. Their fears were unfounded. Thanks to its perfect organization the Central Union met with a success as rapid as unexpected in all the markets of the world. During one year of business it entered into solid relations with Great Britain, France and Japan; established such with most of the large Russian factories; formed for itself a large clientele; and acquired an important position on the flax market. Further it entered into relations with the factory of the union of zemstvos, having a representative among the latter's managers. Its representatives have likewise been admitted to the council of the Popular Bank of Moscow on which foreign business is transacted and to the government Council for Flax and Jute.

In its first year, 1915-1916, the Central Union sold abroad 61,310 puds of linen fibre for a total sum of 700,684 roubles, distributed as follows:

TABLE II. — *Export of Flax abroad by the Central Co-operative Union of Flax Growers.*

Countries of Export	Fibre Exported	Total Value
	Puds	Roubles
Great Britain	54,770	6,268,800
France	6,000	63,000
Japan	540	10,884

On the home market business was done with twelve firms to which 41,503 puds 39 funt (1) of linen fibre, of the total value of 465,909 roubles, were sold. Most of this amount was received by the unions, with whom the Central Union proposes in the near future to deal exclusively, thus constraining them to organize themselves. Further, the Central Union has organized the provision of the army at lower prices than the dealers.

In the same period 15,000 puds of seed were sold to make oil for a total sum of 27,682 roubles, and 72,586 puds of selected seed were bought for a total sum of 218,614 roubles. More than 10,500 deciatines were intended to be planted with this chosen seed which was examined before its sale at the experimental station in Moscow. It was bought by the various organizations in the following proportions; 32,789 puds (45 per cent.) by the co-operative unions, 22,030 puds (30 per cent.) by the zemstvos, and 17,667 puds (25 per cent.) by the co-operative societies. During the first

(1) 1 funt = 1 lb.

year, 1915-1916, the turnover was more than 1,500,000 roubles. It was possible to obtain these results in spite of the scepticism of the public and insufficient propaganda, and in spite of the small number of truly expert co-operators within this sphere.

It should be noted that the work of distributing the selected and inspected seed is enormously important to flax growing. For the first time the exchange of seed among co-operative societies, without the intervention of dealers, has been organized. The zemstvos which began the distribution of selected seed were often obliged to have recourse to dealers, and were not seldom cheated, so that the loss of whole harvests in a given district resulted. As early as 1916 the influence of this work of the union was first felt, the good quality of the seed causing in many places harvests notably above the average. The Central Union was able to pay the peasants from one to three roubles a pud more than they had obtained in the market and yet to make a profit of 5,981 roubles.

At the congress held at Moscow in August 1916 it was resolved to increase the financial strength of the Central Union. The number of shares which shareholders must buy was therefore increased. Each co-operative union is now obliged to buy at least three shares, each co-operative credit society five shares, each provincial agricultural society ten, and each consumers' and agricultural co-operative society two. The societies may not make advances of funds. The Central Union retains 2 kopeks (1) per pud sold for costs of management and 10 kopeks for the formation of an insurance fund. The relations of the Central Union with its member associations have been unified. From the second year onwards each co-operative association must present to the Central Union data as to the quantity and quality of fibre, the market price, and the conditions of payment which it desires. Thus only will the Union consent to become active, and to regulate, as circumstances render necessary, prices and the forms in which payment is made.

Besides this commercial enterprise the Central Union exercises another no less important form of activity. In addition to its weekly bulletin it has published leaflets of propaganda and has furnished information as to the treatment of flax and the sale of products. For this object it has founded a special office to which an instructor and ten specialists belong.

There is no doubt that in the near future, as soon as the idea of co-operation has penetrated the masses, the inflow of flax into the co-operative depots will enormously increase.

We have but to examine the development of this form of co-operation in the various districts of Russia, as shown by the good results of the first year, in order to find confirmation of the forecasts of the managers of the Central Union.

Thus at Rybinsk the people are beginning to understand that it is the co-operative sale of flax which is the most profitable. The number of co-operative associations which undertake in advance business guaranteed

(1) 1 kopeck = about $\frac{1}{4}$ d.

by deposited flax increases constantly. On 1 December forty-six co-operative credit societies and two *volost* funds in the union of Rybinsk did business in advance. On 1 December, before the operations had been completed, 35,614 puds of a total value of 771,968 roubles had been deposited. Further the quality of the fibre, thanks to the work of the instructors, improved sensibly. For this year the union of Rybinsk has anticipated 500,000 puds of fibre.

The Union's commercial success is great but the other work it has accomplished is even more important.

Russian co-operation as concerned with flax has been obliged to undertake very complicated enterprise in order to solve its own problems. First among such undertakings is the campaign against the monopoly of the trade in flax by dealers with foreign countries.

Before the war the exporting of flax was exploited by a small number of foreigners who held a sort of monopoly. They fixed prices. Consequently Russian dealers, instead of exporting on their own account, in the large majority of cases merely executed the orders of the foreign exporters.

During the war the British government entrusted to a firm the monopoly of its purchases of flax in Russia. The Russian government formed a special committee to regulate the sale of flax, and this committee transmitted to the Central Co-operative Union and the Russian Stock Company for Trading in Flax its exclusive right to sell fibre abroad. The two associations came to an agreement, in virtue of which the Central Union now seeks to solve the great problem of providing allied and neutral countries.

Altogether in one year of business the Central Co-operative Union of Flax Growers has been able to exercise activity of exceptional importance: 1) it has undertaken the defence of the interests of peasants; 2) it has largely eliminated middlemen from the flax market; 3) it has notably weakened the domination of this market by foreign capital; 4) it has organized the provision of growers with selected seed, manures and machines, establishing agreements for the regulation of the exchange of seed among co-operative associations of flax growers, and agreements between its member co-operative associations and those of the *Kustari* for the purchase of machines; 5) it has diffused knowledge as to agronomy and co-operation; 6) it has defended and protected flax growing in the zone of military operations (provinces of Pskov and Vitelsk); 7) it has furnished the information necessary to the organization of co-operative selling and the treatment of products.

Hitherto all this activity of the Central Co-operative Union of Flax Growers has not reached beyond European Russia. It is only now that the first isolated attempts at organizing the co-operative sale of flax are being made in Siberia.

In Siberia flax growing is not very common, being responsible for only 7.8 per cent. of the world's total yield of flax. This figure represents, it is true, a crop far larger than that of France and Belgium taken toge-

ther, but only 11.9 per cent. of the total crop of Russia. The area on which flax is grown is small as compared with that under other crops. At Enisseisk it is only 0.8 per cent. of the cultivated area. In the province of the same name the yield of flax in 1914 was 90,000 puds of fibre and 160,000 puds of grain, having a total value of 500,000 roubles. In the province of Tomsk the harvest yielded 350,000 puds of fibre and 400,000 puds of grain. But the organization of co-operative sales has hardly begun, the chief obstacle to it being the fact that no advances are granted. Only two attempts in the latter direction were recorded last year. In the province of Tomsk the co-operative credit society of Majlianisky could sell at high profit 100 puds deposited in its premises. In the province of Enisseisk the co-operative society of Novoe Selovskoe sold 440 puds on which a profit of 2.5 roubles a pud was realised. But the great mass of growers still sell at ridiculous prices, thus leaving to middlemen an annual revenue of more than 1,320,000 roubles.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

FRANCE.

THE CO-OPERATIVE SOCIETIES FOR THE CULTIVATION OF ABANDONED LANDS AND THE RECONSTRUCTION OF DESTROYED VILLAGES. — *Comptes rendus des séances de l'Académie d'Agriculture de France (Reports of the Meetings of the Academy of Agriculture of France)*. Vol. III, No. 21, Paris, 6 June 1917.

At the meeting of the Academy of Agriculture of France, held on the 6th of last June, M. Louis Tardy gave precise data as to the activity exercised by co-operative societies for the cultivation of abandoned lands, particularly in the department of Haute-Garonne.

These co-operative societies are formed among all agriculturists who cede to a society the lands they can no longer cultivate owing to difficulties caused by the war. The object of the societies is the cultivation in common of the properties and lands, their best utilization and the sale of their products under the direction of the departmental Committee for the Cultivation of Abandoned lands.

The co-operative societies which have commissioned this committee to cultivate lands on their behalf now number seven in Haute Garonne. They group 155 members who contribute from 15 to 200 hectares (1) each, and 2,061 hectares in all. Their constitution is civil in form ; their duration is limited to that of the war ; each is administered by an administrative council having at least three members elected by the general meeting and renewable every year. This council nominates its president who represents the society in all its civil and jurisdictional relations.

Every year in December a general meeting is held to which is submitted all the society's business in the past year, that is to say in the agricultural year which begins on 1 November and ends on 31 October.

The balance-sheet is inspected by the departmental committee, and when it has been adopted profits and losses are divided as follows. In the case of profits one half is distributed among all the members in the order of the priority of their admission while the other half constitutes a fund held in common by the society in question and others like it within the department. This fund covers losses on their business which certain of these societies, showing a deficit, may have suffered ; and its balance is distributed among similar societies in the department, in the order of their importance, and within each one of them among the members in the order of the priority of their admission. If the reserve funds are insufficient to cover the losses

(1) 1 hectare = 2.47 acres.

the excess is borne and is distributed according to the conditions fixed for the distribution of profits, that is to say in the order of the priority of the admission of members or lands brought under cultivation. The importance of the contribution of each member of a society and the society as a whole is finally determined by the departmental committee. The general meeting decides whether it be necessary to make an inventory and a distribution at the end of every year or to unite several years in one inventory.

The general council of Haute-Garonne granted to the Departmental Committee for the Cultivation of Abandoned Lands an advance of 30,000 francs to allow of immediate cultivation. Work was at once undertaken to save the vines where this was worth while and to do some spring sowing (of potatoes, maize, buckwheat, beans, etc.). The necessary seed was bought and also sulphate of copper and sulphur, and forage and oats in order that the horses lent by the military administration might be fed. The large influential landowners, who at first were inclined to hold back, became the most devoted partisans of the organization and contributed important properties to it.

In the spring of 1917, 135 hectares had thus been cultivated, In the autumn 1,000 further hectares will be ready to be sown with wheat, oats and barley. In 1918, 2,220 hectares in this one department will have been brought under cultivation. During the two years the lands of mediocre fertility will be cleaned and made into pasturages.

The anticipated expenditure in the two years was of 627,425 francs ; the anticipated receipts, as most carefully estimated, were 860,500 francs ; and this gave an anticipated profit of 233,075 francs. The departmental committee asked, in the name of the seven co-operative societies constituted, for a total advance on anticipated sales and receipts of 400,000 francs, from which sum each of the societies would receive from 35,000 to 100,000 francs.

The competent authority received the application favourably, giving the societies the benefit of article 6 of the law of 7 April 1917 which is as follows : " Special advances may be made for a maximum term of three years to the bodies contemplated by article 2 of the law (i. e. the departments, communes, co-operative societies and associations for mechanical agriculture) from the fund for special advances to agricultural co-operative societies contemplated by the law of 29 December 1906 ".

The example set by Haute-Garonne has aroused the liveliest interest and the idea which has there been so well followed is making progress in other departments. It is believed that co-operation will give important help to the reconstruction of the invaded districts, notably in Aisne, Meurthe-et-Moselle, Meuse and Somme.

The application of co-operation to the reconstruction of the zones devastated by the war has already been attempted in another form. A civil co-operative society for the reconstruction of the destroyed villages of Glannes, Courdemanches, Hucroy and Chatelraould has been founded in Marne. Only a few scattered houses remained in this district. Today it has been cleared and reconstruction has begun. The society groups individual efforts and resources with a view to restoring the buildings injured or destroyed by

the war. Thus it ensures a greater economy in expenditure and the better utilization of the funds destined by the members for this building. The society provides for all possible technical, hygienic and aesthetic improvements, and by grouping the necessary funds gives a better guarantee to contractors. A perceptible economy can thus be realized in the purchase of materials and cost of labour. It may be added that without co-operative organization the transport of building material would have been impossible. The work is executed on behalf of individual members who must contribute the necessary funds in cash or realizable securities, or by assignments to the societies of indemnities due for war damages. A common fund is constituted by charging one per cent. of the total costs of building to meet the society's expenses for all its members. Interesting model by-laws, which allow minors and the incompetent to profit by these societies, have been drawn up.

It is thought that these co-operative societies for reconstruction will be multiplied and have a fairly important development, thanks to the immediate advances of indemnities for war losses, to meet urgent needs.

GREAT BRITAIN AND IRELAND

AN IRISH CO-OPERATIVE SOCIETY FOR GROWING WHEAT. — From *Better Business*
Vol. II, No. 3. Dublin. May 1917.

Co-operative farming in an original form has been practised in Foynes, a small village in County Limerick and on the Shannon.

In the autumn of 1915, when the price of food was beginning to be felt severely by the workmen of the village, Lord Monteagle suggested that they might form a society to grow wheat for the supply of their own wants. He undertook to rent to the society a field of heavy corcass land, seven statute acres in extent, at the rate of £2 an acre. In the first year the constitution of the society provided that it should have only twenty-eight members to be selected by Lord Monteagle; for no more land was available and it was desired that selected members should secure the success of the experiment and smooth the path to future development. After its first year the society was registered as a co-operative society having open membership.

The principal rules of the society, as it was first constituted, were that the price of each share should be 30s. — 5s. being payable on allotment and 6d. a week for fifty weeks; that shareholders more than four weeks in arrears in the payment of weekly instalments should be liable to suffer forfeiture of their shares; that any forfeited shares should be allocated to new and suitable applicants who should pay their full value on the same terms as the original members; that the society should be administered by a committee of seven members elected by the shareholders,

such committee to meet at least once a month and to call a general meeting of shareholders when they deemed it necessary.

The amount realized on the allotment of shares was £7. All the seed had been sown on 6 November 1915. The seed used was 126 stone of "White Standup" and "Garton's Victor" — 18 stone to the statute acre — and cost eight guineas. Lime for the land at 1s. 4d. a hundred-weight cost £1. 18s. 8d. Basic slag at £3. 16s. 6d. a ton cost six guineas. The labour, which might in other societies have been carried out by the members themselves, was a heavy burden. Harrowing and sowing cost £10. 7s. 3d.; the hire of a reaper and binder with extra men and horses £4. 18s. 6d.; rolling the wheat 8s. 6d., stooking £1. 2s. 10d.; and threshing £8. 13s. 8d. The society's total expenditure was £58. 6s. 3½d.

The total yield of grain was 1,052 stone and the total yield of straw 8 ton. 17 cwt. 2 qurs. 16 lbs. The grain was divided among the members, 37½ stone to each. The straw was sold and realized about £19. 12s.; while some damaged wheat, sold at 6d. a stone, fetched 16s., and £2 was realized by letting the grazing. The society's total receipts were £64. 8s. 9d. After all expenses had been met each member received 37½ stone of wheat, and there was a surplus of £6. 2s. 5½d. which it was intended to reserve but which was divided among the members because the new constitution was about to be adopted.

The example of this society ought to stimulate labourers and artisans in other parts of Ireland to imitation. It will not be easy to rent land at £2 an acre, but even had the Foynes Society paid a higher rent they would have made a profitable experiment.

NORWAY.

THE AGRICULTURAL CO-OPERATIVE MOVEMENT. — *International Co-operative Bulletin*, No. 2, 10th year, London, February 1917.

The *Landusholdningsselskapernes Fælleskjøb*, the central co-operative agricultural association of Norway for collective purchase, began work only in 1896; although the joint purchase of artificial manure and fodder was undertaken by individual farmers' societies in the country as early as 1890. The central association developed rapidly, its turnover increasing from 411,980 crowns (1) in 1897-1898 to 14,292,077 crowns in 1915-1916. At first it confined itself to supplying manure and fodder; but before long it also undertook the supply of seeds, machinery, agricultural implements, iron wire, hedge-poles, petroleum and other articles. It set up a seed-cleaning department, a mill at Kambo and a machinery department, and in 1906 it built its first warehouse which was soon followed by several others.

(1) 1 crown of gold = 1.0112s at par.

In 1913 it acquired for 50,000 crowns a large site at Sörengen, and on this erected large warehouses and cranes and established railway communications. The mill at Kambo has, in addition to elevators and bridges, a silo capable of holding 60,000 tons of corn. Housing accommodation is provided for officials and employees.

In 1911 the Association for Norway's Welfare together with various agricultural co-operative societies built at Christiania the "Farmers' House", in order to provide agricultural institutes with good and commodious premises at the lowest possible prices. The *Faelleskjøb* has its offices in the "Farmers' House" and holds the majority of shares in it.

It supports the Association for Norway's Welfare, which promotes the co-operative idea, bearing half the expenses of its two legal advisers; and it took a prominent part in establishing co-operative butchery.

The *Faelleskjøb* comprises 789 agricultural societies, having altogether about 28,000 members. Its official organ, *Samvirke*, is published fortnightly and has a circulation of 30,000 copies.

SPAIN.

THE CO-OPERATIVE DAIRY OF THE "CASA DE GANADEROS" OF SARAGOSSA.

— Memoria sobre el funcionamiento y resultados de la lechería cooperativa en el año 1916 (*Memorandum on the Working and Results of the Co-operative Dairy in 1916*) Tip. y Encuadernación "Heraldo". Saragossa, 1917.

The co-operative society for the sale of milk, founded by the *Casa de Ganaderos* in Saragossa, was among the first realizations in Spain of the co-operative principle in the dairy industry (1). The foundation took place quite recently, in 1915, and the society became active on 1 April 1916.

This co-operative dairy has other objects in addition to the sale of the milk and the derivative products provided by its members. It seeks to organize the insurance of milch stock, to facilitate the acquisition of milk by the methods most fitted to satisfy the precepts of hygiene and the wants of the consumer, and also to attain to other ends which we will cite presently.

The memorandum from which we take these data refers to the activity of the dairy in the nine months of 1916 for which it was at work. In this period the members contributed altogether 259,560 litres (2) of milk of which 96,200 litres were sold on the spot in the vessels in which they were received, while 86,612 litres were sold at buyers' house in 103,100 bottles of one, a half and a quarter litre. The rest of the milk was sold in the form of butter or cheese, that is 14,050 packets of butter and 3,450 small double-cream cheeses. 11,500 litres of skim milk were also sold.

It is a proof of the good organization of this co-operative society that

(1) See our issue for June 1917, page 1.

(2) 1 litre = 0.88 quart.

in April 1916, its first month of activity, fourteen members furnished 14,270 litres of milk and in December forty-three members contributed altogether 44,378 litres. The same rise is found in the sales, for all the available products were sold. One of the difficulties to be surmounted is however that of selling in the summer months in which sales diminish considerably. Hitherto the remedy has been found in making salt butter which has all been sold in the following months. The managing council is studying the question of sterilizing the milk, the dairy being able to dispose of all the necessary machines for this process.

Hitherto the dairy has paid members for the milk they supply from 28 to 30 centimes a litre, according to whether or not the membership fee and the cost of insuring the stock is deducted. The dairy's selling price to consumers is 40 centimes a litre for pasteurized milk delivered at their houses and 35 centimes for that fetched from the dairy. The members of the *Casa de Ganaderos* receive a bonus of 10 and 5 per cent. on these respective prices.

In the year we are examining the dairy's receipts for the sale of the milk and derivative products amounted to 82,804.58 pesetas (1) and its expenses to 80,674.62 pesetas. There was thus a credit balance of 2,129.96 pesetas which was distributed among the supplying members in proportion to the total quantity of milk each of them had contributed.

In conclusion we give some data as to the detailed distribution of the dairy's receipts, month by month.

1916	Receipts (pesetas)						Total
	complete milk	skim milk	butter	cheese	cream	vessels and various	
April	3,163.38	—	319	210	167	52	3,911.38
May	4,397.05	102.20	370	96	104	21	5,090.25
June	7,081.30	118.25	730	77	180	—	8,186.55
July	5,153.63	89.30	642	295	128	8	6,315.93
August	5,772.85	111.50	727	370	13	1	6,995.35
September	6,757.85	86.65	832	298	137	39	8,150.50
October	10,054.80	152.75	1,071	59	9	33	11,379.55
November	12,381.98	215.15	1,663	—	217	39	14,516.13
December	14,636.52	386.60	2,032	—	133	1,070.82	18,258.94
Total	69,399.36	1,262.40	8,386	1,405	1,088	1,263.82	82,804.58

(1) 1 peseta = 8d. at par.

UNION OF SOUTH AFRICA.

THE LAND BANK OF SOUTH AFRICA IN 1916. — *Report for the Year ended 31st December 1916*, presented to both Houses of Parliament. Capetown, 1917.

The activity of the Land Bank of South Africa in 1916 was influenced by general conditions determined by the war and by certain legislation which affected its operations.

On 13 June 1916 the Land Bank Act of 1912, under which the bank was formed, was amended by a new Act of which the following are the essential provisions.

"Notwithstanding anything to the contrary contained in any law in force in the Cape of Good Hope and Natal relating to joint stock companies, it shall be lawful for a society consisting of any number of persons to be formed, without registration under such law if *a*) it is formed for the purpose of promoting agriculture or any agricultural or rural industry in the Union; and *b*) all the members are *bona fide* farmers residing in the Union; and *c*) all the members have by agreement undertaken to be liable severally and in *solidum* for the debts of the society; and *d*) the objects and articles of association are approved of by the board and are lodged with the bank; and a society so formed shall be known as a Co-operative Agricultural Society and shall, for the purpose of the principal Act (i. e. the Land Bank Act of 1912) enjoy the same rights and privileges and be subject to the same obligations as a co-operative society enjoys and is subject to, under the principal Act, and the articles of association and any alteration thereof, when approved by the board and lodged with the bank, shall be binding upon the society and its members.

"In the event of the cancellation or abandonment of any lease, license or allotment from the Crown in respect whereof an advance has, with the consent of the Minister of Lands, been made by the bank, for the purpose of erecting a fence or constructing a dipping tank, there shall, when such land is resumed by the Crown or abandoned by the lessee, licensee or lottee, be paid out of the Consolidated Revenue Fund to the bank so much of the advance (and of the interest due thereon) as the bank is unable to recover from the holder of such lease, license or allotment.

"Any holding in respect of which a note has been made under the provision of the Dipping Tanks Advances Act 1911 (Act No. 20 of 1911) or of the Fencing Act 1912 (Act No. 17 of 1912), may, after payment of all instalments and interest then due to the bank in respect of that holding and with the consent of the board, be ceded or transferred by the owner to any other person; but in that case such holding shall, notwithstanding such cession or transfer, continue to be subject to a first charge, created by such note in favour of the bank, for so much of the advance and interest as is unpaid at the date of the cession or transfer; and the owner for the

time being of such holding shall be liable for the payment of any instalments and interest in respect of the advance, as and when they fall due in the same manner as if the advance had originally been made to him.

"Whenever under the provision of the Dipping Tanks Advances Act, 1911, and Fencing Act, 1912, aforesaid, any advance is made by the bank, the same or any balance thereof which may be transferred in terms of the last preceding section, shall be noted free of charge by the Registrar of Deeds, on the deed of transfer, grant, certificate of title, lease, license or allotment of the holding in respect of which such advance is made, in addition to the note which the Registrar of Deeds is required to make in his registers.

"No advances approved by the board, in respect of the erection of a fence or the construction of a dipping tank, shall be paid over to the person to whom the advance is to be made until the board is satisfied that the fence or tank, as the case may be, has been erected or constructed: Provided that if the holding be mortgaged upon which the dipping tank is to be constructed or the fencing erected, as the case may be, the board, upon receipt of the application, shall give written notice to the registered holder of such mortgage of its intention to grant the advance.

"Notwithstanding anything to the contrary in the principal Act contained, a farmer resident in such areas as have, under the Drought and Flood Distress Relief Act 1916, been declared by the Governor General by proclamation in the Gazette, may, notwithstanding that his property is hypothecated under a mortgage bond, apply to the board for an advance upon second mortgage of land within such area. The board shall, upon receipt of such application, refer it for investigation and report to a local committee... The board after consideration of the committee's report may... make an advance not exceeding five hundred pounds upon second mortgage of the land... Advances made under this section shall bear interest at the rate of five per cent. per annum and shall, together with interest at that rate, be, within a period not exceeding two years from the date of the advance, repayable on such terms and conditions as the board may prescribe."

In 1916 eighty-six applications for advances of this description, amounting together to £30,430, were received. Fifty-eight for a total sum of £17,800 were granted, repayable in three biennial instalments of which the first falls due at the end of the first year. Twenty-two applications for advances aggregating £8,180 were refused.

The enormous rise in the price of fencing material entailed a considerable decrease in the loans for enabling the fencing of properties in conformity with the Act of 1912. In 1913 the bank received 906 applications of loans amounting to £132,998; in 1914 it received 677 for £86,685; and in 1915 it received 132 for £14,746. In 1916 it received only 97 for the total sum of £9,336; and only 70 of these, for the total sum of £6,153, were approved. These loans ought to allow 202 miles of fencing to be constructed in the territory of the Union at an average cost of £30 a mile. In 1916 the total sum paid by the bank for fencing was £12,032.

The war seems on the other hand not to have affected the construction of dipping tanks, doubtless because the materials for these are found within the country and their price has not therefore risen perceptibly. In the year considered 231 applications for loans amounting to £20,615 were received by the bank, but only 175 of them, for the total sum of £15,299, were ratified. This sum represents an average loan of £87 per tank. The total amount paid out in 1916 in loans of this description was £25,370.

On 31 December 1916 the co-operative societies owed to the bank a total sum of £354,729. During 1916 they applied in all for the loan of £71,500 of which £63,600 were granted. Credit operations on current account effected in 1916 were satisfactory: the total sum paid out under this head was £156,284; that received was £146,203. The maximum debt of the year — £250,970 — was owed on 31 December. This sum was covered to the extent of £196,703 by the agricultural products and implements held by the society. The remainder, namely £54,267, represents approximately the sum used by the co-operative societies to supply their members with the merchandise and products necessary to agriculture. The figures already given show that disbursements and receipts approximately balance, a reassuring circumstance which shows that the co-operative societies have thoroughly understood the aim of operations of this kind. The interest falling due on 31 December 1916 on credit on current account, amounting to £6,462, was also paid punctually and entirely. The same is true of the annuities falling due on long-term loans previously granted. In order to make more solid the credit needed by the farmers, the board grants the co-operative societies loans from which to make their members advances on the maize harvest, sold by the medium of the societies. In 1914 and 1915 advances of 7s. 6d. a sack were paid to members, and the products of the sale allowed further payments of 2s. and 2s. 6d. to be made. Difficulty has however been found in convincing both those managing the societies and the farmers themselves that the amount of an advance should not exceed the approximate costs of production, and that the final settlement should be made only after the sale.

In 1916 the maximum advance, at first fixed at 7s. 6d., was raised first to 8s and then to 9s. 6d. a sack, in order to lessen the temptation to members to sell their maize directly to purchasers who offered an average price of 10s. a sack. It is interesting to notice that farmers who remained faithful to their engagements to the co-operative societies realized a larger profit, for they finally received about 12s. 6d. a sack. One society attained to 13s. 7d.

The following figures show the total turnovers of the societies in 1915 and 1916.

	1915	1916
Sale of agricultural products	£ 566,470	454,415
Materials necessary to agriculture, including sacks	127,903	144,365
Total	£ 694,373	598,780

The decreased sales of 1916 are due to the less abundant harvest.

In 1916 the societies realized £359,060 by sales on the spot, £95,355 by exporting.

The Act of 1912, under which the Land Bank was formed, allowed it to grant loans to co-operative societies on condition the members were, under the Act, collectively liable for the debts of their respective societies. As laws on co-operation existed only in the Transvaal and Orange Free State the bank could not help farmers of the Cape or Natal who wished to form co-operative societies. This anomaly was eliminated by the Act of 1916 from which we have already quoted and which had force from 15 June 1916. Its provisions have aroused a most lively interest in the farming classes of these two provinces of the Union. Hitherto however only two co-operative societies have been constituted within them.

The bank has observed that hitherto co-operation in Transvaal has not affected the sale of grain, which presents the greatest difficulties, and therefore it makes a point of encouraging the formation of small societies of a different kind which do not entail large general costs nor the immobilization of a large capital. Thus at Ennersdale in Natal a society for breeding milch cows, the first of its kind in the Union, was founded. It aims at enabling its members to procure good milch cows. The number of members is limited to ten, and no member may be supplied with stock to the value of more than £300. The price of the cows is repaid by monthly instalments, uniform in amount, extending over a period of five years, and secured by the obligation imposed on the members to sell all their cream by the medium of the society, which every month deducts the quota of repayment due from the sum realized by the cream. The amount thus deducted is paid to the bank every month. The society has the right to defer the liquidation of reimbursement when those interested have paid about £50 of the value of the stock furnished to them, in order that all may acquire absolute property in the stock at the same time. This form of organization seems to give good results, and it is found that costs of administration are gradually eliminated.

Another society, also founded at Ennersdale, enables its members to buy manures and sacks. The members are of course bound to sell their products by the medium of the society.

Some efforts have also been made to develop co-operation with a view to colonization.

Since the financial resources placed at the outset at the bank's disposal were gradually exhausted, application was made to the Treasury of the Union for a sum of £775,000, in order to allow the ends for which the bank was constituted to be further pursued. It became clear, especially after the European war had broken out, that agriculture would be the Union's chief source of wealth ; and that if farmers were able to produce live stock and grain in large quantities the profit to the whole country would be immense. The increase of production is conditioned almost exclusively by the amount of capital available for agriculture, and such capital is furnished on good terms by the Land Bank, which is thus the principal agent of agricultural development in the Union of South Africa.

Part II: Insurance and Thrift

RUSSIA.

THE BUSINESS DONE BY FINNISH MUTUAL SOCIETIES FOR INSURANCE AGAINST FIRE AND MORTALITY AMONG LIVE STOCK.

OFFICIAL SOURCE:

RAPPORT SUR L'ÉTAT DES ASSOCIATIONS DE BAILLAGE ET DE PAROISSES POUR L'ASSURANCE CONTRE L'INCENDIE ET CONTRE LA MORTALITÉ DES BESTIAUX DANS L'ANNÉE 1914 (*Report on the State of Leasing and Parochial Associations for Insurance against Fire and Mortality among Live Stock in 1914*) Finlands Officielle Statistik. Helsingfors 1916.

§ I. SOCIETIES INSURING AGAINST FIRE.

The number of societies for mutual insurance against fire having a sphere of activity less in extent than a government was 283 in 1914 as against 287 in 1910 and 265 in 1895. The societies were distributed as follows among the various governments: Nyland 11, Abo and Björneborg 42, Tavastehus 10, Viborg 50, St. Michel 23, Kuopio 30, Vasa 73, Uleåborg 44. The total value insured by these societies was 984,345,554 francs at the end of 1913 and 1,037,355,912 francs at the end of 1914.

At the end of 1914 the value of the insured property in Finland reached about 4,398,000,000 francs without taking into account reinsurance effected by other societies. The following figures show the distribution of insured sums among the various groups of societies. In order that the development may be more clearly perceived the data referring to 1897, 1900, 1905 and 1910 are given.

TABLE I. — *Value insured at the end of certain years.*

	1897 frcs	1900 frcs	1905 frcs	1910 frcs	1914 frcs
Large mutual societies.	339,256,206	659,952,105	1,087,648,105	1,618,884,087	2,025,175,034
Leasing and parochial societies . . .	352,511,270	436,737,520	569,006,331	778,737,748	1,037,355,912
Finnish stock companies	261,365,311	395,246,061	385,769,915	598,582,310	816,517,268
Foreign " "	190,697,825	248,403,933	219,171,739	269,796,891	254,000,000
Russian " "	160,000,000	170,000,000	160,000,000	245,000,000	265,000,000
Total . . .	1,503,830,612	1,910,339,619	2,421,596,090	3,511,001,036	4,398,048,214

From these figures it follows that the leasing and parochial mutual societies possessed at the end of the years cited the following total amounts of insurance :

<u>1897</u>	<u>1900</u>	<u>1905</u>	<u>1910</u>	<u>1914</u>
23.4 %	22.9 %	23.5 %	22.2 %	23.6 %

As regards the distribution of insured values according to their objects by these societies, data furnished by the associations have allowed it to be ascertained that the value of the insurances of real estate represents 68.1 per cent. and that of the insurance of chattels 31.9 per cent. of the total insured value.

The total number of policies was 333,769 at the end of 1914. During this year there was an increase of 12,826 policies. The average for the whole country of the amount covered by a policy was 3,108 francs.

In the year considered there were 2165 fires and the indemnities paid amounted to 1,582,140 francs. Of this sum 1,103,554 francs were paid for losses to real estate and 478,587 francs for those to chattels, that is 69.7 and 30.3, respectively, of the total indemnities paid in the year.

The following table shows the annual number of fires and the losses per million francs of the average amount of a year's insurances.

TABLE II. --- *Number of Fires and Amounts of Damage incurred.*

<u>Year</u>	<u>Number of fires</u>	<u>Value of damage per million francs insured</u> (annual average)
1897	1,220	3.7
1898	1,165	3.3
1899	1,247	3.2
1900	1,282	3.1
1901	1,480	3.4
1902	1,414	3.0
1903	1,304	2.7
1904	1,435	2.8
1905	1,449	2.7
1906	1,512	2.6
1907	1,345	2.2
1908	1,680	2.6
1909	1,547	2.2
1910	1,560	2.07
1911	1,625	1.97
1912	1,762	1.96
1913	1,899	1.98
1914	2,165	2.14

The number of fires per thousand policies was 6.6 in 1914. The fires were distributed as follows according to months :

January	7.8 %	July	11.4 %
February	4.7 "	August.	8.9 "
March	5.1 "	September	10.2 "
April	9.1 "	October	9.1 "
May	10.9 "	November	7.0 "
June	9.5 "	December	6.3 "

The following table shows the causes of fires in 1914 :

TABLE III. — *Causes of fires.*

Causes of fires	Number of fires	%
Lightning	108	5.0
Explosion	1	0.05
Spontaneous combustion.	15	0.7
Fireplaces in a bad state	243	11.2
Chimney fires.	117	5.4
Hot cinders	60	2.8
Carelessness of smokers	37	1.7
Carelessness as to fires	275	12.7
Carelessness in the use of lamps and combustible oils	54	2.5
Careless use of matches	83	3.8
Other carelessness.	213	9.9
Arson	31	1.4
Other causes	318	14.7
Unknown cause.	610	28.2
	2,165	100.0

The insurance value of the property destroyed by incendiary crimes was 63,226 francs.

For every thousand francs of the average annual amount of insurances the amount of losses was 1.56 francs as against 1.62 in 1897, 1.28 in 1900, 1.26 in 1905, 1.36 in 1910 and 1.23 in 1913.

The premium fixed for 1914 was in relation to the amount of the premiums at the end of the year 1.84 francs for a thousand francs, as against an average of 1.64 per thousand for the period from 1897 to 1910.

The amount of the premiums received in 1914 was 2,064,791 francs, employed as follows:

indemnities	1,607,076	frs.	
" share of reinsurers . . .	106,503	"	1,500,573 frs.
<hr/>			
costs of administration	237,516	"	
premiums paid to reinsurers	105,426	"	
apparatus against fire,	22,711	"	
other expenses	70,423	"	
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Total . . .	1,936,649	"	
Surplus in hand . . .	128,142	"	

If there be added to this surplus interest and other small receipts, which in 1914 amounted to 343,912 francs, a total surplus is obtained of 472,054 francs as the increase in the sum which all the societies have in hand.

If the indemnities, the cost of administration and the other expenses incurred during the year by the leasing and parochial societies be compared with the capital insured at the end of the year, it is found that for every 1000 francs of capital insured in 1914 the indemnities amounted to 1.41 francs and the costs of administration to 0.21 francs. The latter item is sufficiently low, owing to the fact that an important share of the administration of these societies is undertaken by the communes, and that the part of the costs which constitutes the pay of the experts etc. is oftenest paid directly by the interested person, without passing through the hands of the society, so that it does not figure in the accounts.

The following table shows the total sum of the premiums received in 1914 by the various groups of insurance societies in Finland, and the sum of the indemnities and the costs of administration in the same year.

TABLE IV. — *Premium, indemnities and costs of administration.*

	Premiums	Indemnities	Costs of administration
Large mutual societies.	4,873,360 frs.	2,738,872 frs.	891,413 frs.
Leasing and parochial societies.	2,064,791 "	1,607,076 "	237,516 "
Finnish stock companies	2,946,644 "	1,319,383 "	562,672 "
Foreign stock companies	882,281 "	511,702 "	139,266 "
Total . . .	10,767,076 frs.	6,167,033 frs.	1,830,866 frs.

The amount of insurance was distributed as follows in 1914 among the societies :

less than 0.5 million francs	7 societies
from 0.5 to 1 " "	29 "
from 1 to 2 " "	70 "
from 2 to 5 " "	128 "
from 5 to 10 " "	38 "
from 10 to 20 " "	7 "
more than 20 " "	44 "
Total . . .	283 societies

Of the total number of societies active at the end of 1914 the insurance of 12.7 per cent. amounted to less than a million francs, that of 70 per cent. was between one and five millions, that of 13.4 per cent. between five and ten millions, that of 3.9 per cent. more than ten millions. At the end of 1896 the corresponding figures were, respectively, 55.5 per cent., 41.7 per cent., 2.0 and 0.8 per cent. Thus in the eighteen years considered the average total amount of insurance increased and there was a noticeable movement towards the higher groups. The average capital insured by all these societies increased from 1,306,000 to 3,665,000 francs in the same period. A considerable number of them however are still not solidly founded. The total amount of their resources at the end of 1914 was 7,162,000 francs.

Generally speaking, however, the position of these societies slightly improved between 1897 and 1914. The following is the average amount of their resources per thousand francs of insured capital.

1897	1900	1905	1910	1914
2.40 francs	3.56 francs	4.90 francs	5.84 francs	6.74 francs

These resources were however very unequally distributed among the mutual societies. To give an idea of them the societies have been grouped in the following table according to the amount of their resources at the end of 1914, their engagements being deducted. The figures show the number of societies belonging to each group :

		Liabilities in excess of resources	12
		Without resources or liabilities	1
Surplus of resources	{	less than 1000 francs ,	1
		from 1,000 to 5,000 francs	55
		" 5,000 " 10,000 "	48
		" 10,000 " 50,000 "	132
		more than 50,000 "	34
		Total	283

Most of the societies in the first three of these groups live from day to day, unable to foresee every year the sum which will cover the year's expenses. Thus a surplus or deficit of from ten to a hundred francs easily occurs.

§ 2. MUTUAL SOCIETIES FOR INSURING LIVE STOCK.

The following data refer to mutual societies for the insurance of live stock having a sphere of activity less than the territory of a government. There were 125 of these at the end of 1914, distributed as follows among the various governments: Nyland 6; Abo and Björneborg 8; Tavastehus 3; Viborg 26; St. Michel 5; Kuopio 5; Vasa 59; Uleåborg 13.

The total sum insured at the end of 1914 was made up as follows:

horses	34,181	total insured value	12,090,842	francs
horned cattle . . .	42,685	" " "	5,008,672	"
small live stock . .	—	" " "	20,733	"
<hr/>				
Total . . .			17,120,247	"

If to these figures be added those of the four societies operating over the whole country the insurance of live stock in the whole country at the date mentioned was as follows:

horses	62,004	total insured value	23,197,687	francs
horned cattle . . .	60,461	" " "	7,699,752	"
small live stock . .	—	" " "	20,733	"
<hr/>				
			30,918,172	"

The number of insured horses represents 20.9 per cent. of the total number of horses, that of insured cattle 5.1 per cent of the total number of cattle.

As regards the amount of their insurance these societies may be grouped as follows:

TABLE V. — *Groups of mutual societies insuring live stock.*

Year	Amount of insurance									
	less than 50,000 francs		from 50,000 to 100,000 francs		from 100,000 to 200,000 francs		from 200,000 to 500,000 francs		500,000 francs and more	
	Number	%	Number	%	Number	%	Number	%	Number	%
1905 . . .	10	17.9	13	23.2	19	33.9	11	19.6	3	5.4
1906 . . .	18	23.7	17	22.4	27	35.5	12	15.8	2	2.6
1907 . . .	14	17.5	19	23.8	32	40.0	13	16.2	2	2.5
1908 . . .	16	18.8	17	20.0	31	36.5	19	22.4	2	2.3
1909 . . .	16	17.5	17	18.7	35	38.5	20	22.0	3	3.3
1910 . . .	22	22.0	22	22.0	30	30.0	23	23.0	3	3.0
1911 . . .	22	21.0	25	23.8	35	33.3	20	19.0	3	2.9
1912 . . .	25	22.5	27	24.3	37	33.4	19	17.1	3	2.7
1913 . . .	27	22.3	33	27.3	38	31.4	20	16.5	3	2.5
1914 . . .	30	24.0	29	23.2	41	32.8	22	17.6	3	2.4

The percentage of accidents was 2.07 in the case of the insured horses and 1.45 in that of the insured cattle. In the former case indemnities amounted to 1.27 per cent. and in the latter to 1.04 per cent. of the total insured value.

The average indemnity paid was 213.27 francs for a horse, 81.89 francs for a horned animal.

The following table gives the data in this respect for eleven years, the only years for which statistics have been established :

TABLE VI. — *Mutual insurance of live stock 1904-1914.*

Year	Accidents %		Indemnity per 100 francs insured		Indemnity per accident	
	Horses	Cattle	Horses	Cattle	Horses	Cattle
	%	%	francs	francs	francs	francs
1904	1.67	1.68	1.10	1.00	230.03	55.43
1905	1.77	1.94	0.96	1.08	212.53	52.68
1906	1.60	1.86	1.11	1.18	229.73	55.96
1907	1.63	1.45	0.97	1.00	195.64	62.25
1908	1.65	1.19	1.11	0.87	224.69	68.21
1909	1.74	1.46	1.16	1.00	226.70	65.20
1910	2.03	1.26	1.20	0.93	204.80	71.30
1911	2.31	1.25	1.68	0.97	299.22	76.56
1912	2.21	1.52	1.37	1.06	214.05	71.08
1913	1.94	1.33	1.26	1.00	225.49	80.65
1914	2.07	1.45	1.25	1.04	213.12	81.89

The premiums received in 1914 were as follows :

For insurance of horses only	115,030	francs
" " " cattle "	23,444	"
" reserve fund	8,311	"
" collective insurance of horses and cattle	<u>104,251</u>	"
	251,036	francs

This sum represents 1.49 per cent. of the average amount of the insured value during the year considered. Other receipts, interest, etc. brought the societies 19,715 francs or 0.12 per cent. of the average amount of the insurances. The total receipts amounted therefore to 270,751 francs or 1.60 per cent. of the average amount of the insurances. Of this sum there was spent :

on indemnities	201,104	francs	or	1.19	per cent.	of the insured value
" costs of administration	29,602	"	"	0.17	"	" " " " " "
" increasing the reserve fund . .	16,023	"	"	0.10	"	" " " " " "
" other expenses	<u>15,287</u>	"	"	0.09	"	" " " " " "
Total	262,015	"	"	1.55	"	" " " " " "

There is therefore an available balance of 8,736 francs.

The costs of administration amounted to 12.2 per cent. and other expenses (costs of organization, interest, etc.) to 6.3 per cent. of the premiums received in the year.

The balance-sheets of the societies show, when engagements have been subtracted, a credit surplus of 116,211 francs or 6.79 francs per thousand francs of the capital insured at the end of the year. As appears these societies have not yet amassed considerable capital.

Part III: Credit

GERMANY.

PRUSSIAN LEGISLATION AS TO THE "RENTENGÜTER" AND ITS RESULTS FROM 1891 TO 1914.

SOURCES :

STATISTISCHE KORRESPONDENZ, Berlin, 1915.

DARMSTÄDTER (Dr. F.) : Die Entstehung der Rentengutgesetzgebung (*The Origin of the Legislation as to the « Rentengüter »*). Berlin, 1915.

The first attempts at Prussian colonization go back to the first half of the nineteenth century. In 1835 Von Landenburg, the chief of the domain, divided into parcels and sold two domains in the district of Grimmen. The purchase price was paid in cash or by redemption in thirty years. In the following years, from 1840 to 1852, the Prussian State parcelled and sold to the peasants twenty-seven domains, but the conditions of purchase were less favourable than the earlier ones to the buyers who were obliged to pay one fourth of the price in cash and the remainder within a period of from three to five years. Since 1852 this sale of State property has ceased.

About the middle of the nineteenth century, on 2 March 1850, the *Rentenbanken*, of which the aim was the financial liquidation of feudal agrarian relations, were formed. The business of these banks was as follows: they paid to feudatories in cash the price of lands ceded to the peasants, who were obliged to repay this price to the banks by the method of redemption in thirty years.

In forming these banks the Prussian government hoped that they would also undertake colonization, that is to say buy large properties and resell them to the peasants in parcels. This hope was disappointed: the banks' capital was insufficient for the business of colonization and the delay of thirty years was too short.

The second half of the nineteenth century was marked in Germany by a strong current of emigration and this decided the Prussian government to take up anew the question of colonization. A proposed law was presented to the parliament in 1868; and henceforth until 1891 the matter was

the subject of numerous studies and discussions. In 1891 a law was passed which created *Rentenbanken* of a new type.

This law had been preceded by the colonization law of 26 April 1886 which was however applied only in the two provinces of Posnania and West Prussia. It may be considered as partaking of the character of official instructions as to colonization: it indicates the methods of colonization which it allows and protects, and presents some calculations as to redemption premiums, leaving the contracting parties otherwise free.

On 27 June 1890 it was applied in all the provinces, and on 7 July 1891 the so-called law of the *Rentenbanken* was passed and seemed to decide all questions definitely.

It is the aim of this law that the *Rentenbanken*, helped by State credit, should buy the large landed properties, divide them into parcels of an average area of from five to fifteen hectares (1) and resell these to the peasants.

The following are some details as to the organization and the management of these banks.

1) In each province a *Rentenbank* and a general commission are set up. The latter is the intermediary between the seller and the buyer of land and draws up the plan for subdivision; the former undertakes the financial business, paying the seller and receiving redemption premiums from the colonists.

2) The seller, that is the large proprietor who wishes to sell his land, offers it to the general commission. The latter sends out experts charged to draw up the plan for subdivision and to fix the price for the whole property and the individual parcels.

3) The plan for subdivision, the prices being indicated on it, is sent to the proprietor on whom it is incumbent to find purchasers for the parcels.

4) When these have been found and have declared before the general commission their willingness to buy the parcels at the fixed prices, the seller applies to the bank for the total selling price. In place of cash he receives *Rentenbanken* bonds, guaranteed by the State, and bearing interest at the rates of 3 $\frac{1}{2}$ and 4 per cent.

5) If the property in question be burdened with debts the bank must, before paying the proprietor, and in conformity with the provisions voted in 1909, settle the debts in cash or bonds, and must only give the remainder of the amount fixed by the general commission to the proprietor.

On paying the proprietor the bank itself becomes proprietor of the land, and in such capacity sells the parcels to the colonists. The amount of the purchase price is paid by the latter by the method of redemption in sixty and a half years. Instead of this term the bank may allow terms of fifty-seven and a half and fifty-nine and a half years, in these cases discharging the purchasers from obligation to pay the redemption premium for three or for one years.

The purchasers of parcels are authorized to pay their debts before the

(1) 1 hectare = 2.47 acres.

term of sixty and a half year expires. If they do so within less than ten years they must have the permission of the general commission.

6) According to the provisions voted in 1896 and 1900 the bank grants to the purchasers of parcels the credit necessary to allow them to meet the costs of initial installation, building dwellings, improvements, purchase of live stock, etc., and to pay co-heirs. These debts are paid by the method of redemption in a period of from ten to thirty years.

From 1891 to 1914 the Rentenbanken obtained the following results :

	Number of large pro- perties bought by the banks —	Number of colonies formed by the banks —	Total area of colonies — hectares —	Average area of a colony — hectares —
1891-1892	59	392	5,083	13.0
1893	176	1,490	13,296	8.9
1894	239	1,902	21,829	11.5
1895	131	1,237	12,908	10.4
1896	104	1,167	14,177	12.1
1897	93	916	9,990	10.9
1898	73	720	9,164	12.7
1899	54	651	8,046	12.4
1900	44	322	4,297	13.3
1901	49	422	4,714	11.2
1902	59	311	3,645	11.7
1903	67	393	5,400	13.7
1904	64	376	5,242	13.9
1905	103	664	9,778	14.7
1906	109	618	10,049	16.3
1907	173	914	13,417	14.7
1908	662	1,223	12,476	10.2
1909	880	1,554	17,166	11.0
1910	1,014	1,587	12,709	8.0
1911	780	1,328	14,110	10.6
1912	1,493	1,216	12,383	10.2
1913	1,066	1,201	11,398	9.5
1914	1,115	931	7,171	7.7

The data as to the cultivation of the parcels sold to the colonists give us the following facts regarding 1913 :

The land is employed as follows :

3,173	hectares	for	buildings and gardens
164,451	"	"	fields
40,550	"	"	meadows
14,252	"	"	forests
8,851	"	"	roads etc.

As regards the extent of holdings :

5,073	colonists	have	less than 2 ½ hectares
2,728	"	"	from 2 ½ to 5 hectares
4,705	"	"	" 5 to 10 "
6,339	"	"	" 10 to 25 "
1,759	"	"	more than 25 hectares.

The following is the distribution according to provinces and area :

Province	less than 2 ½ hectares	from 2 ½ to 5 hectares	from 5 to 10 hectares	from 10 to 25 hectares	more than 25 hectares	Total — hectares
East Prussia	640	462	1,054	1,104	309	3,569
West Prussia	214	532	1,175	1,147	292	3,360
Brandenburg	303	207	158	205	42	815
Pomerania	321	244	777	2,512	352	4,386
Posnania	943	270	521	518	162	2,404
Silesia	446	509	418	171	58	1,602
Saxony	273	84	78	36	22	493
Schleswig-Holstein . .	356	83	181	401	300	1,321
Hanover	478	85	175	161	20	919
Westphalia	984	338	164	73	27	1,585
Hesse-Nassau	86	13	4	11	5	119
Rhine Province. . . .	29	1	—	—	—	30

Until 1908 parcels could not be of less than two hectares, but the formation of smaller parcels, even those of less than one hectare, has since been allowed. From 1908 to 1913 there were formed :

2,623	parcels	of	less than 1 hectare
1,162	"	"	from 1 to 2 ½ hectares

The purchase prices of parcels according to provinces were as follows :

Province	Area — hectares	Total value — marks	Average value per hectare — marks
East Prussia	44,884	37,711,053	840
West Prussia	39,388	26,268,386	667
Brandenburg	6,524	10,834,627	1,661
Pomerania	78,990	96,797,355	1,225
Posnania	17,968	18,831,009	1,048
Silesia	9,914	13,042,479	1,316
Saxony	3,397	8,960,548	2,638
Schleswig-Holstein	20,200	31,905,504	1,579
Hanover	4,871	8,634,028	1,773
Westphalia	4,738	12,817,339	2,705
Hesse-Nassau	392	664,542	695
Rhine Province	11	182,402	26,582

In purchasing large properties for the purpose of subdivision the *Rentenbanken* paid :

in cash	39,860,286	marks
in their bonds	177,831,093	"
in mortgages	15,208,145	"
At the same time the banks granted to the colonists other loans amounting to	19,176,872	"

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE « BANCO EL HOGAR ARGENTINO » IN 1915-1916. — *La Revue économique et financière* Paris, 21 April 1916.

The following is a reproduction of this bank's profit and loss account closed on 31 August 1916 :

Debit.

General costs, taxes, rents, miscellaneous.	Fr.	1,509,585
Commissions.	"	12,367
Service of bonds	"	6,229,061
Expenses of bank's property, repairs, taxes insurance, etc.	"	211,281
Legal expenses in advance	"	134,089
Reserve fund, personal bonds	"	1,320,000
Certificates of participation in accumulated interest.	"	3,092,236
Total	Fr.	12,508,619

Credit.

Interest, fines, premiums, exchange and commissions.	Fr.	20,570,646
Reserve Premiums	"	1,183,600
Letting	"	634,452
Dividends retained and transference duty	"	69,664
Total	Fr.	22,458,362
Amount of debit account	"	12,508,619
Net Profit	Fr.	<u>9,949,743</u>

The report presented by the administrative council to the general meeting of 30 October 1916 shows that the arrest of business obliges the bank to increase considerably the number of its purchases of properties. To avoid irreparable losses the company must wait for a more favourable period for the liquidation in its own interest of its operations.

Mortgage loans reached at the end of the year the sum of 96,327,619 piastres of national money (the piastre is discounted in francs at the fixed exchange of 2.20 francs); and the amortization fund, that is the effective value of the certificates of participation assigned to loans, was 15,823,631 piastres. The corresponding figures for 1914-1915 were, respectively, 98,445,457 piastres and 14,389,045 piastres.

The promises of sales amounted to 12,307,816 piastres, with an amortization fund represented by the effective value of the certificates of participation, namely 1,991,086 piastres, as against 15,316,900 piastres and 2,036,141 piastres, respectively, in 1914-1915.

The bank's real estate is represented by the sum of 12,830,854 piastres as against 7,348,357 piastres on 31 August 1915.

"Personal bonds" figure in the account for 616,633 piastres: they represent the liquidation of mortgage loans not covered by the sale of the guaranteeing properties. Although the balance is charged against the debtors the management has thought it useful to form a "reserve fund for personal bonds" into which it has paid a sum of 600,000 piastres.

To resume — although the auctions of real estate which have been forced upon the company have necessitated a new organization and entailed new cares, it has been possible to maintain the bank in a sufficiently stable position.

* * *

THE BUSINESS OF THE MORTGAGE COMPANY OF THE RIVER PLATE, LTD, IN 1916. — From *The Statist*, Vol. LXXXIX, No. 2,032 London, 3 February 1917.

The report presented to the thirtieth ordinary general meeting of this company in London on 31 January gave interesting information as to mortgage business in the Argentine Republic in 1916.

The country experienced one of the severest droughts on record which wrought serious damage to agricultural and pastoral industries. It lasted from January to November, the rain coming just before the wheat was ready to be cut and therefore too late to affect the yield of wheat materially, although in time to improve the maize which at one period promised very badly. On the pastoral industry the effects of the drought were less serious although anxiety was at one time felt with regard to them. A few months of drought caused a shortage of pasture: the condition of the cattle began to deteriorate and there was considerable mortality among them. Fortunately the drought broke before these losses had assumed large proportions and apprehensions as to a serious loss of breeding cattle were allayed. The wool clip was good and fetched record prices. The export of Argentine meat exceeded all previous records owing to the demands of the armies in the field, and the farmers obtained very good prices for the stock they sold to freezing companies.

The company's profits were within £100 of their amount in 1915, a most satisfactory result since both the agricultural and the pastoral industries

were prosperous in 1915 and very much the reverse in 1916. If clients suffered from diminished earnings they were at least able to meet their liabilities with fair punctuality, being helped by their exceptional profits of the previous year. Mortgage loans were reduced by £68,000 and the money thus released was invested in British government securities. The properties taken over under foreclosure were slightly less than in the previous year, representing only £2,381 or about $\frac{1}{8}$ per cent. of the outstanding loans. Investments, under the general heading of British government securities, appeared in the balance-sheet as £170,105, their estimated value on 31 December 1916. The profit and loss account showed that the gross revenue was £131,777 or rather more than £1,000 in excess of that of the previous year. After the expenses, the interest debenture stock, etc. had been deducted and £5,000 set on one side towards the depreciation of investments, there remained a net profit for the year of £68,630 — much the same as that for 1915. For 1915 after £20,000 had been placed in the reserve a dividend of 18 per cent. had been paid. This year a bonus of 2 per cent, which would bring the total dividend paid on the ordinary share capital up to 20 per cent., was recommended.

CHINA.

THE FUNCTIONS OF THE AGRICULTURAL AND INDUSTRIAL BANKS. — *Chung-Fu Kung Pao* (Official Journal) No. 1231, 12 October 1915.

The law as to the agricultural and industrial banks is dated 8 October 1915 and became active on the 12th of the same month.

This law defines these banks as limited liability stock companies aiming at providing the credit necessary to agricultural and industrial enterprises. The minimum sum of the capital shares is fixed at 100,000 *yuän* (1) and the minimum value of an individual share at 10 *yuän*.

Even if the fixed capital of the agricultural and industrial banks has not been entirely covered they must be inspected, as soon as at least half of it has been paid up, by the competent authorities, who will make certain that the founders and shareholders are really honest persons disposing of sufficient capital and capable of belonging to a company. The same authorities will take note of the amount of the capital already paid up, and the application for foundation will then be transmitted to the Ministry of Finances which may or may not give authority for the bank to become active.

Each agricultural and industrial bank will have the territory of a *hsien* as its sphere of action. There may be only one bank in each such territory. If however there are special local conditions the competent authorities may send to the Ministry of Finances a request for the division

(1) 1 *yuän* is a piece of fine silver weighing 414. 51282 grains (troy).

of a *hsien* into two territories at most, or for the union of two *hsien* into a single banking territory.

The shareholders of these banks must be recruited in the first place among the persons born in their respective *hsien*, living in them or possessing property in them. If the number of shareholders of this description be insufficient others may be recruited outside the bank's territorial sphere until the fixed number has been reached. Corporations within a bank's territory may become shareholders in it. The share certificates of the agricultural and industrial banks are all nominative and their sale to persons who are not Chinese citizens is forbidden.

The following classes of operations may be effected by the agricultural and industrial banks: 1) mortgage loans repayable by instalments graduated over a period of five years; 2) mortgage loans repayable at a fixed date, namely at the expiry of a term of three years; 3) loans on pledged and imperishable agricultural products, to be repaid at the end of a year or by instalments graduated over a year; 4) loans on the pledged products of fishing when the borrower has an exclusive fishing right, to be repaid in a year or by instalments graduated over a year — a supplementary pledge of public securities or an additional mortgage may be exacted by the bank as a guarantee of these loans; 5) loans on pledged titles to provincial or central government loans or on shares in commercial companies, repayable at the end of a year or by instalments graduated over a year; 6) loans repayable at the end of three years and not guaranteed by a mortgage, being granted to groups of at least ten agriculturists or industrial workers who are completely solvent; 7) loans not guaranteed by a mortgage, granted with the authority of the competent local official to local corporations in enjoyment of certain and easily realized profits.

These loans may be granted only for the following objects:

- 1) the improvement of uncultivated lands and crops in general;
- 2) irrigation and reforestation;
- 3) purchase of seeds and manures and all kinds of primary materials used in agriculture and industry;
- 4) storage of and traffic in agricultural and industrial products;
- 5) purchase and repair of machines, implements and live stock useful to agriculture and industry;
- 6) construction and repair of buildings for agricultural and industrial purposes;
- 7) purchase of live stock with a view to the improvement of breeding;
- 8) purchase of silkworm eggs, young fish and instruments of all kinds for the development of sericulture and pisciculture;
- 9) all works aiming at the development of agriculture and industry.

If the real estate to which these provisions refer be not already registered and insured the agricultural and industrial banks cannot accept mortgages of it as security for loans. The amount of a loan made by the bank must not exceed two thirds of the value of the mortgaged property, the value as estimated by the lending bank being taken as basis.

Only first mortgages are accepted as security and mortgaged real estate must be productive. If the value of mortgaged property diminish after it has been estimated the bank may require a supplementary estimate, and may, if the borrower do not fulfil such requirement, proceed

to liquidate the debt at a fixed date, or immediately exact full repayment of the loan even if the term for which it was made have not expired. The bank may similarly exact repayment at a date fixed by itself if the borrower do not assign the loan to the object for which it was made, or if circumstances have caused a modification of its employment.

The agricultural and industrial banks may apply to the Ministry of Finances for authority to issue bonds. The total sum of their issues may not exceed the total sum of their loans nor be more than twice the sum of their paid-up capital. Bonds are normally payable to bearer but may be nominative, and the minimum value of one is fixed at five yuān. They bear interest and may be repaid with an additional premium. The amount of the bonds repaid each year must not be less than the total sum of the loans repaid to the bank in the same year.

In drawing up their annual balance-sheet the agricultural and industrial banks must deduct from the amount of the net profits a sum equivalent to not less than a tenth of such amount, in order to constitute a reserve fund with which to cover eventual losses and ensure an average dividend on shares. The reserve fund may not be used without the preliminary authority of the Ministry of Finances, applications to draw on it backed by a statement of reasons being transmitted to this ministry by the medium of the competent authorities.

These banks are placed under the control of the Ministry of Finances and the authorities within whose jurisdiction they find themselves. The local representative of the central government in the various provinces may also make enquiries as to their situation.

The authorities exercising control may order an agricultural and industrial bank to present a written report on the situation of its affairs. They may also verify the information in the bank's books or any other document as to the sums and the bonds which the bank has in hand. Subsequently they must draw up a confidential report to the competent authorities which these will transmit to the Ministry of Finances. The controlling authorities may attend meetings and express opinions at them, without however having the right to vote.

The Ministry of Finances or the competent authorities may, when they think necessary, limit the concession of loans as well as any other business undertaken by the agricultural and industrial banks.

The agricultural and industrial banks fix the maximum rate of interest on their operations.

Part IV: Agricultural Economy in General

BRITISH INDIA.

LAND TENURES IN THE PANJAB IN THEIR ORIGINAL FORM AND AS AFFECTED BY BRITISH RULE.

by J. M. DOUPE.

There is no more interesting subject of historical investigation than the effect which two civilizations, brought by circumstances into intimate relations, have one on the other. This is so even when both belong to the same family of nations, and what occurs is a peaceful penetration of ideas and an exchange of the fruits of scientific enquiry. But when one nation has imposed its rule on races covering vast expanses of the world's surface and the most various degrees of culture the investigation becomes still more absorbing. This is what happened in the case of the Roman Empire 2000 years ago, and has happened as regards the British Indian Empire in the past 150 years. In the case of both Empires the rulers looked with the most tolerant eye on the native institutions of their subjects, but inevitably they exercised upon them, often unconsciously or even against their will, a profound influence.

No race is fit to control the destinies of an alien people unless it itself possesses a political instinct leading it to abstain from intermeddling as a Government with the religious and social life of its subjects. On the whole the British in India succeeded in avoiding all direct interference in such matters. Even widow-burning was only forbidden after long delay and hesitation. In conquered territory the English planted their cantonments, and sooner or later their own law-courts, and promulgated their own criminal code. But as regards civil law they maintained the Hindu and Muhammadan codes to govern the most intimate and important relations of life, supplementing them in matters such as business contracts by maxims drawn from English law. In the Panjab politic compliance and disregard for uniformity were pushed still further. Finding that domestic relations and the tenure of land were governed by village customs, probably older than, and certainly inconsistent with, the legal dicta of Hindu Brahmans and Muhammadan Kazis, they accepted the former as it stood, and in time took steps to have it accurately recorded. The

curious result has been that they have acquiesced in a system whereby one rule of inheritance may be applied in one village and another next door.

The settlement officers put in charge of the assessment of the land revenue of the different districts were given the still more important task of deciding and recording the title under which every field in the country was held and tilled. Their business was to register the rights and obligations of individuals and communities as they actually existed.

Thus it would seem that every care had been taken to preserve the framework of land tenure as it stood. The foundation on which that had always rested was that the holding is the property of the family, and not of the individual. That fact is written large in the early records of rights, where the undivided family holding is very prominent. Settlement officers also fully recognized the communal framework of village life; in fact, as we shall see, they assumed its existence even in parts of the Panjab, where it had no reality. But the rapid material development following on the enforcement of order and the fixing of a reasonable land revenue demand for a term of years, combined with the influence of Western ideas in the sphere of political economy and the practical working of English courts of law, shook and nearly destroyed the land system. A communal village organization and a land tenure which had withstood the political storms of centuries threatened to succumb to "the cancers of a long peace".

Ownership of land in the English sense does not exist, and never did exist, in the Panjab. The powers of the actual holder are limited by the title of the State to a share of the produce and by the right of the family to restrain him from any action which would without necessity involve the loss of its patrimony. Subject to these restrictions he has full powers of management and disposes of the produce at his pleasure. Before British rule the Raja or Chief often realized the "ruler's share" in kind, and what was left to the tiller of the soil was usually a bare subsistence. An old family, which had a claim to ownership but did not actually cultivate or arrange for cultivation, might be allowed a petty share of the harvest, say $\frac{1}{40}$ th, while the ruler took $\frac{1}{4}$ th, $\frac{1}{3}$ rd, or $\frac{1}{2}$. Over the waste the State asserted extensive rights, and, even when it was included in village boundaries, did not hesitate to plant on it new settlers, on the plea that it was more than the old village required for pasturage. The predecessors of British rulers did not trouble their heads with theory, being occupied with the practical problem of filling their coffers. But the easiest way to define the relations between native rulers and landholders in the Panjab is to look on the State as superior landlord, and the actual holders as entitled to keep the land they tilled and graze their cattle in the surrounding waste, so long as they paid the customary rent to the Government. It is hardly worth while to discuss the question whether the landholder had a right of alienation. Sales did occur, but generally speaking the demand of the State left nothing of value to transfer. Rent only emerged when the British Government reduced the share in kind into a cash payment fixed for

a term of years, and in the interval left to the landholder the full benefit of any extensions of cultivation or improvements which he might effect.

The limitations which the near agnates of a landholder could impose on his freedom of action are equally clear. From the first a statement of village customs was included in the record of rights of every estate, and these documents furnish valuable evidence of the restricted nature of the tenure. It became still clearer when some twenty-five years after annexation settlement officers were ordered to draw up statements of tribal customs in every district in which a revision of the land revenue assessment was undertaken. Of course custom varied, but the typical case was shown to be that inheritance was confined to sons and, failing sons, to male agnates, to the exclusion of daughters and their offspring, because by marriage the daughter passes into another family. The landholder had no power to interfere by gift or will with the rule of descent, or even to give one son a larger share than another. The sonless man could not rob his near agnates by adopting an heir. If he adopted at all, he was bound to choose one of them.

The early records of village custom were drawn up when sales and mortgages were still very rare. A usual entry is — "Hitherto there have been no sales or mortgages in this village. But, if at any future time a proprietor should wish to sell or mortgage in order to pay the Government revenue or provide for his own necessities, he must first offer it to his near agnates". This right of pre-emption as a means of preventing the intrusion of strangers into the village community was recognised in the earliest Panjab Code of Law. Curiously enough the later tribal records do not deal directly with the all important question of the power of transfer by sale or mortgage. By the time they were made the increased value of land had made it an object of desire to outsiders, and the action of the courts had largely invalidated the customary restrictions on alienation.

The first settlement officers in the eastern and central districts found groups of landholders organized in village communities. They were familiar with the type from experience gained in an adjoining province, and this saved them from making mistakes. In a small village all the landholders would be found to be of one tribe and to claim descent from a common ancestor, in a large one groups of the same or of different tribes occupied separate wards. The shares of the different wards, and of individual landholders within the wards, at least in the common waste, were usually based on relationship real or assumed. Each ward might hold its share of the cultivated land in a single block or in several parcels. The individual landholder as a rule had scattered fields so as to give him a share of the manured land near the village site and of the various kinds of soil in the outlying area. A great feature was the waste held in definite shares, but of which the enjoyment was common. There seems to have been no limitation of user. Every man put in as many cattle as he chose, and, if he had the means, broke up suitable patches of land. The tiller of common land acquired no title. He merely had a right to retain on partition so much as was not in excess of his share. British revenue law has emphasized the joint responsibility of members of the village community for pay-

ment of the land revenue, but its enforcement in actual practice is extremely rare.

Living with the group of landholders were artisans and menials following hereditary occupations for the benefit of the community. Their services were defined, and were paid for by a definite share of the produce at harvest time. All, landholders and dependents, had their houses crowded together on a common site, the impure leather workers and scavengers being settled on the outskirts or in separate sites close to the main village. Lastly there was a common fund for village expenses, and disputes within the brotherhood were settled by a village council.

In the hill country in the north of the Panjab the conditions were wholly different. The Rajas were universal landlords in a far stronger sense than in the plains. Each holder held his parcel of land in virtue of a deed of grant given by the ruler to himself or to his ancestor. He built his house on his own allotment, and the individuals in possession of contiguous holdings were not necessarily united by any real or pretended bond of relationship. It was impossible that groups of holdings scattered over the hills should form village communities. The holding was itself the true revenue unit, and the man who held it had an equitable title to remain undisturbed so long as he tilled the land and paid the rent. The cultivators had a right of user in the waste, but the title of the State to do what it pleased with it was clearer and stronger than in the eastern plains, where the ruler might well hesitate to interfere with powerful villages. In Kangra, the most important hill district in the Panjab, the first settlement officer tried to squeeze the tenures into a pattern which he knew. He transformed into estates the large groups of scattered holdings which the Rajas had formed for revenue purposes. In this way he subjected the landholders to a purely artificial bond of joint responsibility for the payment of land revenue. What was more serious he allotted to these unreal village communities large areas of waste, much of it forest land, as common property. The result has been that the State has been greatly hampered in its efforts to preserve forest growth for the good of the surrounding population and of the community at large.

No greater contrast can be imagined than that which exists between the green hill country of Kangra in the north east of the Panjab and its arid south western plains. Curiously enough extreme dissimilarity of agricultural conditions produced very considerable resemblances in land tenure. The rainfall in the South West is so scanty that outside the strips of land close to the great rivers cultivation depends wholly on artificial irrigation. To supply this became the best foundation of a permanent title, and it was recognized that this had been acquired in one form or another by the well sinker over the land reclaimed through its means from the vast surrounding waste. The latter was used as a grazing ground for sheep and a browsing area for goats and camels. Certain tribes or leading families which from time immemorial had pastured their flocks and herds in the waste claimed rights over it like those which the Rajas asserted over the hill forests. Similar rights were claimed by the descendants of holy men

to whom rulers or people of influence had made grants, and by farmers of the land revenue, who by a familiar process had developed out of a fiscal privilege a proprietary title. Sometimes groups of men of a grazing tribe or the members of an important family sank a number of wells, partly to water their cattle and partly to grow a little food, in a single locality, and built their houses on a common site. But often the well sinker had to obtain the assent of some overlord, generally the head or heads of one of the old tribes or families, and pay a small quit rent in the form of a fraction of the produce as a perpetual acknowledgement of seignorial rights. When the Sikhs took over the country the administration of a large part of it was for many years in the hands of a very shrewd and capable governor, intent on increasing his revenue by promoting tillage. When he felt disposed he took over the right of allotting land for cultivation, but he wisely recognized the rights of the old families to seignorial dues. The sinkers of wells in favoured spots scattered about the huge waste had often no bond of relationship or even of common interest. Each lived with his dependents and labourers on his own well, near which were grouped a few huts and cattle pens. The proper way of dealing with tenures of this sort would have been to treat the well as the revenue unit, and allot to it a reasonable area, say from 50 to 100 acres, and to make the well owner responsible to the State for land revenue and to the superior landowner for a small seignorial fee. The waste should have been recorded as the property of the State subject to rights of user for grazing and browsing, so long as it was not broken up, by the old tribes of nomad graziers and the well owners. What was actually done was to form groups of wells into purely artificial estates, to attach to them large areas of waste, and make the owners jointly responsible for payment of the land revenue. The incongruity of this procedure was pointed out at the time, but the attraction of a sealed pattern was too strong to resist. The waste was so vast that the absurdity of handing it all over as personal property to scattered well owners and a sparse population of nomad graziers was fortunately perceived. Needless large areas were however enclosed in village boundaries, and lay uncultivated till many years later the State at great expense brought canal water to these thirsty lands. The tracts where State ownership was reserved are some of them now the sites of prosperous canal colonies, with hundreds of thousands of settlers drawn largely from congested districts in the Central Panjab. The vast area of sandy waste between the Jhelam and the Indus was handed over entirely to a comparatively small number of families. Accordingly when some years ago there was a question of excavating a great canal from the Indus, it was thought necessary, as a preliminary step, to induce the descendants of these people to surrender their rights in part of what without water was practically worthless in return for the promise of irrigation in the part they retained. It seems probable that the recognition or non-recognition of the superior proprietary title, entitling the holder to receive a seignorial fee, depended sometimes on the idiosyncracies of individual settlement officers. The tenure has also been

extinguished in a number of cases by the inferior owner buying out the superior owner's right, the intrinsic value of which has often been small.

The juxtaposition of dominant families and of a miscellaneous collection of inferior tribes, which is common in the South Western Panjab, is equally a feature of the North Western districts. But there religious dislike and political expediency had led the Sikh Governors, whom we displaced, to do their utmost to depress the great Muhammadan families and tribes, which in some cases had actually ruled over large tracts. The result was that the old tenures, except in the wilder Western tract, where the Sikhs had to be content with a more or less nominal sovereignty, had to a large extent been obliterated. The British officers charged with the making of the registers of titles in land were faced by contending claims, the actual cultivators seeking to maintain the status quo, and the old families clamouring for the revival of rights wrested from them by the oppression of the Sikhs. The original villages of the leading clans often covered very large areas, and cultivators had been located in outlying hamlets, whose occupants now claimed to be treated as entirely independent communities. Tenants in the parent villages alleged that they also possessed full ownership, because in the Sikh times the old landholders had received no sort of recognition of proprietorship. It is a curious fact that our officers for some years after annexation viewed the claims of old families with scant sympathy. Fortunately the settlements of a large part of the North Western Panjab were not completed till after the Mutiny. The shock of that convulsion again turned men's thoughts to the dangers besetting a society in which everyone is on a dead level of mediocrity, and after 1857 there was a disposition to concede something to the descendants of men who had been stripped of their rank and privileges by the Sikhs, while maintaining to the actual cultivators of the soil most of the advantages of which we found them in actual possession. In no part of the province was the influence of settlement officers in moulding, and even creating, land tenures more strongly marked. They had in fact to seek a fair compromise, and were not unsuccessful in finding one. Three classes of right holders emerged, the superior owner, the ordinary owner, and the limited owner. The last and lowest class were recognized as owners of the lands they tilled, but they had no share in the village waste. Some of them were not even full owners of their own holdings, but paid a proprietary fee to the ordinary owners, who were regarded as the real village community. The latter class had rights in the waste. But where our officers held that the existence of a superior proprietor was proved, the ordinary owner had to pay him, harvest by harvest, a seignorial fee. In the west the old families had, as already remarked, been able to maintain their position fairly well even under the Sikhs, and there we still find large properties consisting of several, or even many, villages owned by a single person or by a small group of near relatives. Here too some of the superior owners, as in parts of the southwest, besides receiving seignorial dues are recorded as owners of the waste. The village community in the true sense of the term hardly existed in large parts of the North West Panjab.

One of the oldest forms of land tenure in the world, the periodical redistribution of village or tribal land, survived till comparatively recent times, and possibly still has left its traces, among the Pathan tribes on the North West Frontier of British India, and is widely prevalent among the independent tribes which, though lying beyond the administrative border line, are subject to the political control of the Chief Commissioner of the North West Frontier Province. It is a more curious fact that it still exists among a few village communities in the extreme south-east of the Panjab. A Pathan tribe usually acquired its possessions by the sword. Having done so, it proceeded to partition the conquered lands. Each subdivision of the tribe took its own block, and each clansman in the subdivision took his share in one or several parcels, as soil conditions dictated. Sometimes a share was allotted for each woman and child. The subdivision built a big village in its block and called it after its own name. Besides the clansmen the village population included religious men, and village servants and artisans, who held land free of charge in return for services in peace and war. Another class of dependents of superior rank was located in hamlets on the outskirts of the block. They were known by the picturesque names of "loin-girders" and "dwellers in the shade", paid no rent, and in time of peace rendered no service. But when their Pathan overlords, in whose shade they sat, were raided or marched out to raid others, they were bound to join in the fray. To secure a continuance of the original equality of division, it was the rule that the land should be redistributed at shorter or longer intervals. In Peshawar the custom lasted down to a comparatively recent period and even involved the transfer of whole villages. "Shifting severalty" is likely to disappear when a civilized Government fixes for a term of years the State's rent for each holding, and when the order it establishes encourages the extension of cultivation and the assertion of individual rights. But among the independent Pathan tribes it will probably long survive, and be a source of trouble and bloodshed. In 1901 heavy fighting went on in Upper Swat across the Peshawar border, because after one subdivision had held an important village for twenty-five years, the others thought it was their turn. Among Pathan tribes religious men and chiefs were often given special grants of land for their maintenance. It is easy to see how, when once subdivision broke down, Pathan tenures would take on themselves forms very like those familiar elsewhere, and that is what has actually to a large extent happened.

It is the business of a registrar of titles in land to record facts as he finds them. But in the special circumstances which attended the occupation of the Panjab by the British, it was justifiable to go further and to revive titles in abeyance, which had been recently destroyed by the oppressive acts of our immediate predecessors. It is questionable whether this might not equitably have been done more freely. But on the whole the settlement officers did their work well. They cannot be charged with subverting the communal character of the land tenure; on the contrary, their tendency was to impose a communal village organization where it did.

not exist, and in fact could have no real existence. The threat to the integrity of the indigenous land tenures came not from any action on their part but from economic and legal causes.

The early administrators of the Panjab had sufficient statesmanship to see how essential it was that a foreign government should maintain the framework of society which it found in being. But they could not but be affected by the exaggerated individualism which marked the economic theories prevalent in the middle of the 19th century, and by the notion that agricultural advance depended on the attraction of fresh capital to the business of tillage. Accordingly we find a very distinguished officer, who became the second Lieutenant Governor of the province, apologizing for the giving of legal force to a village custom of pre-emption, which was designed to prevent the intrusion of strangers into the communal landholding community. Still stranger is it to read in an early manual for the guidance of officials that the author contemplated without regret "a gradual process" by which the existing village communities might "melt away and give place to a more modern and perhaps more politically nice distribution of property".

For the next twenty years everything tended to break up the old order. The mere advent of a strong Government affording equal protection and equal justice to all made the individual landholder less dependent on the support of his agnates and of the village community. The multiplication of courts of law and of an inferior type of lawyer among a people naturally quarrelsome and litigious inevitably sapped the influence of the village councils, which for practical purposes gradually faded out of existence. A cash assessment distributed for a long term of years over holdings created a state of things in which communal responsibility for the revenue demand was rarely intruded on the attention of the individual landholder. The moderation of the State's revenue or rent, and the security of title given by an authoritative record, meant for the peasant proprietor a great inflation of credit. His old plan of limited borrowing on the pledge of crops, cattle, or jewellery, was replaced by extravagant borrowing on the security of the land. Sales and mortgages to moneylenders became a common and increasing feature of village life, and the right of the next heirs to object fell practically into abeyance. The official attitude for some time was apathetic. Shortsightedness masquerading as common sense was not alarmed, and talked of the investment of capital in the soil. Even among those who viewed the growing disappropriation of the peasantry with misgivings, there was a disposition to regard the process as the inevitable result of economic laws, and to hope that it would not go too far. But, as each quinquennium showed that the hope was vain, opinion changed. The social and political evils of a landless peasantry came to be recognized. The belief that the maxims of western political economists, as laid down in the middle of last century, could be applied to every country and stage of society was shaken. Experience showed that the capitalist landholder in India was as a rule nothing but a rent-receiver. The interest in primitive institutions aroused by the works of Sir Henry Summer

Maine and others was stimulated among English officials by the abundant evidence of their survival in India, and it became clear that ownership in the English sense, involving as it does free power of disposition, was wholly alien to the ideas of the Panjab peasant. This truth became apparent to the Chief Court of the province, and from 1887 onwards it formed the foundation of a series of decisions on sales and mortgages by sonless proprietors, adoption, gifts, and pre-emption. It was well that the courts should at last have put themselves in line with facts. But by the time they did so the process of disintegration had gone too far to be cured by correct expositions of village custom, and it had become increasingly evident that the evil must be cured, if cured at all, by legislation.

The remedy adopted after long discussion is embodied in the Panjab Land Alienation Act of 1900, which imposed very drastic restraints on land transfers. It gave the State power to declare by notification what tribes in each district were "agricultural". It forbade any member of an agricultural tribe to sell land to a non-agriculturist without the sanction of the officer in charge of the district, the intention being that sanction should only be given in exceptional circumstances. The usual form of Panjab mortgage, by which the mortgagee took the landlord's share of the produce instead of interest, and assumed all the rights and liabilities of the landowner till the principal was repaid, was made illegal in the case of land mortgaged by a member of an agricultural tribe to a non-agriculturist. Other forms existed which were still more burdensome to the mortgager. These also disappeared. Certain statutory forms were substituted, the only one of any practical importance being a mortgage for a limited period not exceeding twenty years, all the rights of the mortgager being suspended, and the rents and profits enjoyed by the mortgage being taken as extinguishing by the end of the term his claim for both principal and interest. Sales of agricultural land in execution of decree, which had always been subject to severe restrictions in the Panjab, were absolutely forbidden as regarded land owned by members of agricultural tribes. It may be noted in passing that under the Civil Procedure Code the following kinds of property belonging to an agriculturist are exempt from attachment

- (a) implements of husbandry,
- (b) the cattle and seed grain necessary for him to earn his livelihood,
- (c) the house and other buildings which he owns or occupies.

For the present the Government has with rare exceptions treated all scheduled agricultural tribes in a district as a single group, and has permitted a man of one such tribe to sell or mortgage without restraint to a man of another. But it holds in reserve the power to treat each tribe as a group by itself and still further to limit freedom of transfer. The exercise of this power may in some cases become necessary, e. g. if one agricultural tribe should develop to a serious extent landgrabbing tendencies, and the result be rapid disappropriation of economically weaker tribes.

It will be observed that the motives of this legislation were political and economic. No direct attempt was made to re-establish the "family" holding as the unit of the village communities. But a strong barrier was

set up against the further intrusion into these communities of the most dangerous element of disintegration, the small trader and moneylender. For the protection of the family holding the village customary law, now better understood, remained intact. One branch of that law, which has been twisted out of its original shape, the Government decided to re-fashion. Pre-emption had been robbed by two old judgements of the Chief Court of most of its meaning. Usufructuary mortgages of the type already described were far more common than sales, and in practice in a great many cases involved the permanent disappropriation of the peasant mortgager. But the Court held that the right of pre-emption did not apply to such mortgages, except where the village record of rights expressly provided otherwise. It also decided that a proprietor by purchase, though a stranger to the original village brotherhood, had as good a right as any agnate cosharer to claim pre-emption. Thus the custom which was intended to keep the stranger out was twisted in such a way as to make it easy for him to extend his possession once he had gained a footing. The same limitation of the right to sales and the same extension of it as regards the persons who might exercise it were unfortunately embodied in laws passed in 1872 and 1878. There was indeed a clause saving custom, but the tribal codes of custom subsequently drawn disposed of the subject by saying that it was regulated by law. When the Chief Court of the province realized that the old decisions were wrong it sought for evidence of the real custom in the old village records of rights. At last in 1905 a new Act was passed which as regards sales brought the law into conformity with custom, giving the right of pre-emption to the heirs of the vendor. Even in the case of a joint holding a cosharer not related to the vendor was given no right unless the agnate cosharers declined to take advantage of their prior title. It must be admitted that many judicial officers regard pre-emption in its practical working as pernicious.

The Land Alienation Act has succeeded in its object. It has stopped the disappropriation of the Panjab peasant by the moneylender, and it has not lowered the credit of the farmer to any undesirable extent. Indeed the value of land has continued to rise, and the revenue or rent charged by the State is not on the average more than one per cent of the selling price. Government action no longer aids and abets the disintegration of the family holding and the communal village community. Probably little more can be done. The old order will never return in its entirety, and perhaps in the changed surroundings of today it is undesirable that it should. Whether the communal village spirit, which has decayed so rapidly, will revive, is doubtful, and it must always be remembered that it was only strong at any time in part of the province. Proposals have been made to revive village councils by giving them power to deal with petty civil and criminal cases. It is uncertain whether any such revival would have permanent popularity or success. It seems more likely that, if common village life renews itself, its resurrection will be the indirect result of the growing movement of agricultural co-operation, which has been such a striking feature of the recent history of the Panjab.

UNITED STATES.

THE REGULATION OF THE FRUIT TRADE.

OFFICIAL, SOURCES:

- AN ACT TO FIX THE STANDARD BARREL FOR FRUITS, VEGETABLES AND OTHER DRY COMMODITIES. 4 March 1915. Public. No. 307 63rd Congress.
- AN ACT TO FIX STANDARDS FOR CLIMAX BASKETS FOR GRAPES AND OTHER FRUITS AND VEGETABLES, AND TO FIX STANDARDS FOR BASKETS AND OTHER CONTAINERS FOR SMALL FRUITS, BERRIES, AND VEGETABLES, AND FOR OTHER PURPOSES. 31 August 1916. Public. No. 248 64th Congress.
- AN ACT TO ESTABLISH A STANDARD BARREL AND STANDARD GRADES FOR APPLES WHEN PACKED IN BARRELS AND FOR OTHER PURPOSES. 3 August 1912.
- THE DELAWARE APPLE LAW. 12 March 1915.
- AN ACT TO ESTABLISH A STANDARD FOR THE PACKING IN THE STATE OF CALIFORNIA OF THE KINDS OF FRESH FRUITS SPECIFIED IN THIS ACT, FOR SALE OR FOR TRANSPORTATION FOR SALE, FOR INTERSTATE AND FOREIGN SHIPMENT, AND TO PREVENT DECEPTION IN THE PACKING; ALSO TO ESTABLISH A SYSTEM OF INSPECTION OF THE SAME. 10 June 1915. Chapter 659. A. B. 851.
- AN ACT REGULATING THE SALE, OFFERING FOR SALE OR EXPOSING FOR SALE OF VEGETABLES, GRAPES AND FRUITS; PROVIDING STANDARD CONTAINERS, BASKETS AND TRAYS, THEREFOR; AND IMPOSING PENALTIES. 1 May 1916. Pennsylvania, N° 121.

OTHER SOURCES:

CALIFORNIA FRUIT NEWS. Vol. 54, Nos. 1483 to 1486; 9, 16, 23 and 30 December 1916; San Francisco.

For several years there has been in the United States a movement towards giving a more stable basis to the trade in fruit and vegetables so as to simplify to a great extent the relations between the producer and the buyer. Congress and the assemblies of several States have taken the matter up and have sought to standardize the various products, if not for a whole State at least for the whole territory of a county, and to determine the shape, kind and dimensions of standard receptacles in which they are transported, so that a merchant knows exactly, having the guarantee of State inspection, the weight and quantity of fruit in any box or other package which he receives.

The importance of such measures has been similarly recognized in other countries, such as Canada and Australia, where also the fruit trade is regulated for the prevention of frauds at the expense of merchants or consumers and the simplification of transactions of purchase and sale.

The Californian law, which we will presently analyse, has considerable bearing not only on trade but also on the production of the State in general. The fixing of standards results in closing the foreign market to

defective fruit ; and growers therefore seek to improve the average quality of their products by choosing more carefully the varieties grown and by more scientific culture. Hence will result an increase in the horticultural wealth of the State.

No forecasts can be made as to the future development of these ideas in the many States of the Union, but the interest taken in the matter by the Federal Department of Agriculture allows the supposition that the example of California will be followed in other fruit-growing regions.

§ I. THE ORGANIZATION OF THE FRUIT TRADE AND THE ACTIVITY OF THE OFFICE OF MARKETS.

As now organized the production of perishable fruit and vegetables is a highly specialized agricultural industry. It is concentrated to a large extent in certain localities but it is conducted mainly on a small scale. Many of the regions especially devoted to fruit growing are situated far from markets. The industry in this specialized form came into existence when the growth of great cities necessitated the drawing of supplies of perishable food from larger areas than those comprising the farms in the cities' immediate neighbourhood, and when railroads made the utilization of this larger area possible. Areas for producing perishable food have now been extended into the extreme south and south-west. Of approximately 100 million tons of farm produce annually transported by train about 20 million tons are perishable. Public authorities, growers and merchants have already for many years studied, each from their own point of view, the problems inherent in the transport and sale of these perishable products.

a) *Production.* — Perishable fruits and vegetables are grown on a relatively small scale while the large aggregate demands of the great market centres have brought into existence dealers who handle such produce only in large lots. This fact and the recognition that many other problems of marketing these goods could be solved only by giving the producers some of the advantages of operations on a large scale led the Office of Markets and Rural Organization early in its work to advocate the co-operative organization of growers wherever conditions were favourable.

b) *Preparation for Transport.* — Perhaps the most serious losses in this trade are due to unseasonable picking of the fruits and vegetables or their improper handling after they are ready to be marketed. The products are handled roughly and their decay on the way to the market is thus facilitated. Careful grading of the harvested products is also essential if they are to secure a reasonable price. And not the least of the problems connected with this trade is that of the packing of these perishable goods and of selecting for them suitable receptacles, of the proper type and dimensions, which will give them adequate protection and an attractive appearance and will not be too costly.

Another step which can be taken with profit, when certain valuable products are to be transported under refrigeration over long distances,

is the precooling of the packed fruits or vegetables by blasts of very cold air immediately before or just after they have been placed in the refrigerator cars. * When perishable goods are stowed at their normal temperature in a refrigerator car the limited quantity of ice used does not chill them for several days. As a result they continue to ripen and in many cases begin to decay. Precooling obviously cannot be practised by individual consigners on a small scale but it would be profitable in many cases to co-operative associations. It has proved particularly valuable to such of these associations as transport oranges from California across the continent.

The Office of Markets and Rural Organization finds that the producer may grow and even develop varieties of fruit or vegetables which will remain in good condition for long periods and stand better than the usual varieties the delays and rough handling to which consignments may be subjected before they reach the consumer.

c) Sale. — The losses of perishable fruits and vegetables are not due solely to the mechanical operations of marketing — the handling at producing points, on cars and at the market. The intangible machinery of supply and demand causes the heaviest losses, bringing about violent fluctuations of price and also gluts. One fact emphasized by the investigations of the Office of Markets and Rural Organization is that even when there is a severe general glut of a commodity that quantity of it which is really first-class can often be sold profitably. Indication of an impending glut should therefore cause the producer to grade more strictly than ever. Gluts due to faulty distribution can be prevented when it is possible to keep consigners accurately informed as to supplies at marketing points. By surveys of producing areas and market centres the Office of Markets and Rural Organization has collected as many data as possible with regard to the supply of and demand for perishable produce. The normal consuming power of numerous markets for certain products has been ascertained and the data have been furnished to consigners with excellent results.

The advantages gained by standardized handling, grading and packing are strikingly shown by results obtained in the Californian citrus industry. Large losses accompanied almost every consignment to eastern markets in the earliest days of the industry, when practically all enterprise was individualistic. Many such losses were due to defective transport but an appreciable proportion to a failure properly to grade and pack the fruit. Co-operative organizations arose and undertook to a large extent the work of grading and packing. Losses were materially reduced but not to the point felt to be desirable. Investigations begun by the department shortly after 1900 disclosed the fact that careless picking was chiefly responsible for the remaining losses. Picking as well as grading and packing was then standardized throughout the industry, and losses were brought down to a very satisfactory minimum.

Recent investigations of the canteloupe industry by the Office of Markets and Rural Organization showed the need of standardizing the hand-

ling of this product also. Losses were found to result on a failure carefully to select the melons for size and quality, on loose and unattractive packing and on the use of receptacles of haphazard sizes and shapes.* Studies of the marketing of berries, peaches and other perishable products have further emphasized the general need for standardization.

In studying the problems of standardization involved in the marketing of these perishable products the office has also gathered information as to the methods in which they are solved in various places. A bulletin as to this phase of marketing canteloupes has been issued, and bulletins on grading, packing and transporting other fruits and vegetables will follow. The office is also compiling a digest of State laws on standardization and on the weights and measures used in marketing.

It is believed that co-operative associations may be relied upon as important factors in bringing about a general adoption of standards for supplies and methods in marketing. Such organization can extend uniform practices over important provinces, and standardization on a larger scale can be effected through national organizations.

§ 2. THE CALIFORNIAN ACT OF 1915 AS TO THE FRUIT TRADE.

State and Federal legislation have to some extent applied the principles discovered and brought forward by the Office of Markets and Rural Organization, principles accepted alike by producers, dealers and consumers.

In 1912 Congress established a standard barrel to be used for apples in inter-State commerce. On 4 March 1915 Congress passed an Act, which had force from 1 July 1916, to fix a standard barrel for fruits, vegetables and other dry commodities; and on 31 August 1916 a third Act, which has force from 1 November 1917, fixed standards for "Climax" baskets for grapes and other fruits and vegetables, and fixed standards for baskets and other containers for small fruits, berries and vegetables.

Further on 12 March 1915 an Act was passed in Delaware which amended chapter 21 of the State's revised code by provisions regulating the grading, packing, marking, transport and sale of apples. In California on 10 June 1915 the legislature passed an Act "to establish a standard for the packing in the State of California of the kinds of fresh fruit specified in this Act, for sale or for transportation for sale, for interstate and foreign shipment, and to prevent deception in the packing; also to establish a system of inspection for the same". On 1 May 1915 the Pennsylvanian legislature passed an Act "regulating the sale, offering for sale or exposing for sale of vegetables, grapes and fruits; providing standard containers — baskets and trays — therefor; and imposing penalties."

a) *The Provisions of the Law.* — We will examine in more detail the Californian Act. It has been possible to observe its working for a year, and owing to the importance of fruit growing in California it has been the subject of much discussion.

The principal provisions of this law, passed on 10 June 1915 and effective since 9 August 1915, are as follows :

" There is hereby created and established a standard for the packing of fresh fruits, for interstate and foreign shipment, of the kinds specified in this Act. Any box, basket, package or container of fresh fruit of the kinds specified in this Act, which shall be packed and offered for sale or for transportation for sale, shall be packed in accordance with the specifications herein made. All deciduous fruits of the kinds specified in this Act when packed shall be practically free from insects and fungous diseases. All fresh fruit of the kind specified in this Act which shall be sold in bulk, or loose in the box without packing, shall be exempt from the provisions of this Act.

" All cherries packed in boxes or packages shall contain fruit of practically uniform quality and maturity and one variety only, except that such boxes or packages may contain more than one variety if such fact be plainly stamped on the outside of the box or package with the words " Mixed Varieties " with letters one half inch high. Each box or package (of cherries) shall be stamped on the outside with the minimum weight of contents and name of variety or varieties. Peaches, apricots, pears, plums and prunes shall be of practically uniform size, quality and maturity. When packed in crates, packages or containers, made up of two or more subcontainers having sloping sides for the purpose of ventilation of the fruit therein, the fruit shall not vary in size more than ten per cent. and no layer below the top layer shall contain a greater numerical count than the top layer. Each box, crate, package, container or subcontainer shall be stamped upon the outside with the minimum weight of its contents, shall bear in plain letters the name of the variety contained therein, shall also be marked with the approximate number of peaches in the box which shall be within four peaches of the true count. Grapes packed for table use shall be of uniform quality and maturity and shall be well matured and show a (determined) sugar content.... Each crate or other package (of such grapes) and containers therein shall bear in plain figures the minimum weight of contents.... Berries shall be packed in uniform packages. Canteoupes shall be placed in standard crates.

" All boxes, crates, packages or containers shall bear upon them, in plain sight and plain letters on the outside, the name of the orchard, if any, and the name and post office address of the person, firm, company, corporation or organization who shall have first packed or authorized the packing of the same, also the name of the locality where the fruit is grown.

" In counties having a county horticultural commissioner it shall be his duty and the duty of his deputies, acting as inspectors, which office is hereby created, to enforce the provisions of this Act... In a city and county or in counties having no county horticultural commissioner or deputy, it shall be the duty of the county board of supervisors, upon petition filed with them, to appoint inspectors. Said petition shall be signed by at least twenty-five bona fide fruit growers residing in that county or city and county. Upon the petition of twenty-five resident freeholders

who are fruit growers or shippers of fruit, the county horticultural commissioner or board of supervisors... shall immediately remove said inspector for neglect of duty, malfeasance in office or general unfitness for office....

" Any person, firm, company, corporation or organization who shall knowingly pack, or cause to be packed, fruit of the kinds specified herein, in boxes, crates, packages, containers or sub-containers, to be offered for sale or transportation for sale, in wilful violation of this Act, shall be guilty of a misdemeanour. "

b) *The Application of the Law.* — This law was originally drafted by a committee of interested growers and consigners in consultation with the State horticultural commissioner. It was amended many times but always by its friends.

Various counties had tried for some years to accomplish the desired regulation of packing by agreements with the growers, the transporting companies or both ; but saving in the case of Eldorado and Placer counties their success was no more than partial or temporary. In Eldorado and Placer counties the voluntary associations of shippers and growers issued printed rules and diagrams which were posted in the orchard packing houses. The scheme worked exceedingly well where the shipping firms co-operated and refused any package below the standard, but otherwise the need of State authority for the inspectors was seen. The present law was largely based on experience of these regulations, and thus it emanated from the industry itself and public sentiment had been to some extent prepared for it.

The law has helped the grower because it has raised prices, largely as a result of the better standard reached by the fruit. It has helped the consumer and the general public because the improvement in quality has outweighed the increase in prices. It has benefited the transport companies who have received, with the better prices, more for their work, and have been able to show better profits to their stockholders.

The absolute impossibility of an examination by the inspectors of every packed box of fruit is apparent. The greatest good can be accomplished only when the fruit growers, packers and shippers themselves are in sympathy with the work and willing to co-operate with the inspectors by conforming to specifications. It was this co-operation of growers, packers and shippers with county horticultural commissioners, in San Joaquin, Fresno, Sacramento and other counties growing table grapes, which made possible last year an efficiently standardized packing of grapes resulting in splendid prices.

In the first year for which the law was in force about 20,000 carloads of fresh deciduous fruit were subject to its provisions. The experiment was entirely satisfactory, eastern buyers referring to the " marvellously scientific pack of California fruit ". Thousands of crates of fruit were rejected, but the grade of the consignments was raised many per cent. with comparatively little injury to anyone and extremely low administrative costs. Many thousands of dollars were added to the industry.

c) *Suggested Modifications.* — The chief abuses which the law sought

to remedy were the following : 1) Topping — a top layer of good berries conceals inferior berries ; 2) Irregularity of size and of degree of maturity within one package ; 3) Pest infection which in States having quarantine laws results in the condemnation of whole consignments ; 4) The mixing of varieties in one package ; 5) Wrong and irregular marks ; 6) Small content of sugar. In one year progress has been made towards preventing these abuses and the law has thus been shown to have great practical value.

At the Forty-Ninth State Fruit Grower's Convention, held at Napa in November 1916, some proposals were however made for completing and improving the regulation of the fruit trade. These were mainly : a) that all counties should by certain procedure be compelled to appoint inspectors ; b) that the different counties of the State should formulate uniform standards, thus introducing simplicity into the trade and allowing distant buyers to place orders at fixed prices for definite classes of goods ; c) that packed fruit should be more precisely defined ; d) that the law should apply to all consignments of fruit, including those intended for Californian markets ; e) that some central authority should have complete control of the inspection of fruit.

§ 3. AN EFFORT TO STANDARDIZE THE POTATO TRADE.

While the movement towards the standardizing of fruit intended for sale is thus gaining ground, an effort is also being made in many States to standardize the potato trade which has not yet been scientifically organized. Wholesale potato merchants recognize the need for standardization in order to minimize the expense, risk and waste which threaten to change into loss the small profits of this trade. Two grades, N° 1 and N° 2, should be established for every variety of potato grown. The use is recommended of machine potato diggers, and of machine sizers or graders which grade the potatoes according to size only, leaving the producer to grade them according to quality or in other words to weed out those which are defective.

The trade is simplified by the use of uniform containers. A Federal Act fixes the capacity of the barrel commonly used for potatoes but a large variety of sacks are also used and the fixing of prices in the different markets is thus needlessly complicated.

For the realization of the desired reform the formation of co-operative associations and the aid of those already in existence would be of the greatest service.

FRANCE.

THE CONDITIONS OF RURAL LIFE IN FRANCE.

OFFICIAL SOURCE :

DUGÉ DE BERNONVILLE (L.) *Enquête sur les conditions de la vie ouvrière et rurale en France en 1913-1914 (Enquiry as to the conditions of labouring and rural life in France in 1913-1914).* In *Bulletin de la Statistique générale de la France et du Service d'Observation des Prix.* — Vol. V, part I, Paris, October 1916 ; Vol VI, part II, January 1917.

By a decree of 17 May 1913 a commission was instituted at the Ministry of Labour for the study of " the physiology of labour in trades, and the conditions of existence and aptitude for trades and its formation in labouring and peasant families ". This commission comprised members of parliament and members of the *Institut de France* and of scientific bodies. It divided itself into two sub-commissions of which one undertook research in laboratories and the other investigations and statistical research. Among the items on the latter's programme was " Diet of labouring and rural families. Share of alcohol in the family budget. Relation between housing and a labourer's health and life ".

Before we examine the results of this enquiry into rural life we will to some extent specify the method of research.

§ I. METHOD OF ENQUIRY.

Following on a circular of the Ministry of Labour, dated July 1913, the prefects supplied lists of those willing to collect the necessary data. In order to ensure uniformity two forms of questions were prepared, one covering information as to each family visited, the other as to each village or rural district taken altogether. The latter form could be filled up only in the rural districts but the former equally well in a town. The questions on the former bear on the detailed composition of a family, its diseases, housing conditions, conditions as to trade and income, duration of work, cost of food, heating and lighting and finally skill in a trade. The second form provides information as to the number of families in a district and their distribution according to trades, the conditions of rural industries, the designation of disabled persons, rural emigration and the cost of maintaining children in labouring families.

In March 1914 the *Statistique Générale de la France* had collected 3200 questionnaires regarding families and 330 regarding villages distributed in forty-nine departments. When it had taken stock of these first results the commission expressed a wish for the extension of the enquiry to all departments. Consequently a certain number of new forms were sent out between March and July 1914. The declaration of war prevented the pursuit of the enquiry and arrested the commission's labour. At the end of July 1914 the *Statistique Générale de la France* had brought together 3700 questionnaires regarding families and 450 regarding villages distributed over fifty-seven departments. The formation, in consequence of the financial law of 15 July 1914, of a department for the observation of prices allowed a first abstract of the forms to be made by this department.

Thirty departments forwarded no questionnaire, namely Aisne, Allier, Ariège, Aude, Cantal, Charente-Inférieure, Cher, Dordogne, Gers, Hérault, Ille-et-Vilaine, Indre, Loire, Loire-Inférieure, Maine-et-Loire, Manche, Marne, Nièvre, Pas-de-Calais, Puy-de-Dôme, Hautes-Pyrénées, Pyrénées-Orientales, Rhône, Seine, Seine-et-Marne, Deux-Sèvres, Tarn-et-Garonne, Vendée and Vienne. The papers received were very unequally distributed among the other fifty-seven departments. Some, like Nord, Oise, Saône-et-Loire and Seine-Inférieure, sent in hundreds of questionnaires, others a fairly large number of them, and yet others only a few. The larger number of filled-up questionnaires came from rural communes or small towns. Nearly a quarter were signed by schoolmasters. Generally speaking the forms are carefully filled up, with the exception of the relatively small number filled up by the heads of families themselves. As a rule the investigator has noted the facts, after having questioned those interested and verified data by every means in his power (1).

§ 2. INCOME OF AGRICULTURAL LABOURERS.

The category of agricultural labourers comprises journeymen working at agriculture and labourers working by the day or the piece, agricultural labourers paid by the month, the season or the year, and farm servants. It excludes farmers, métayers and owners cultivating their own lands.

Of the agricultural labourers reached by the enquiry some were fed by their employers but the majority were not. If the households be grouped

(1) The families forming the object of the collected monographs may be classified according to the trade followed by the head of each family in the following five large groups : 1) labourers in factories, commerce and transport ; 2) various employees and officials ; 3) artisans and small traders working for themselves ; 4) landowning agriculturists and farmers and métayers ; 5) agricultural labourers.

by districts or regions (I), and in each region according to the number of their members, the results shown in the following table are obtained :

TABLE I. — *Families of agricultural labourers not fed by employers.*

(N = Number of families visited, — I = Annual income in francs).

	Number of members of a family							
	2	3	4	5	6	7	8 and more	Total
Region I	N. 11	13	15	19	18	4	15	95
	I. 1,485	1,374	1,750	1,591	1,783	2,062	2,394	1,757
Region II	N. 7	6	10	9	7	4	3	46
	I. 1,338	1,240	1,075	1,298	1,086	1,065	1,271	1,194
Region III	N. 3	4	4	2	7	2	5	27
	I. 1,007	1,032	1,417	950	1,003	860	1,659	1,176
Region IV	N. 2	2	5	—	1	2	—	12
	I. 780	1,145	1,292	—	1,200	1,900	—	1,276
Region V	N. 1	4	4	4	4	3	2	22
	I. 1,600	1,172	979	1,369	940	1,405	1,175	1,182
Region VI	N. 2	3	4	3	4	3	—	19
	I. 940	1,417	875	1,267	982	1,282	—	1,116
Region VII	N. 16	7	10	5	7	4	3	52
	I. 882	1,262	1,466	1,176	915	1,032	1,164	1,106
Region VIII	N. 2	8	6	9	6	7	10	48
	I. 1,018	1,040	1,092	1,060	1,181	1,114	1,730	1,221
Total	N. 44	47	58	51	54	29	38	321
	I. 1,134	1,231	1,341	1,344	1,274	1,310	1,872	1,343

The average annual income of all the 321 households observed comes out at 1343 francs or about two thirds of the figure obtained, by the same enquiry, in the case of industrial workers' households. We should note that income in kind is notably greater in the case of the agricultural than

(1) The following regions are those to which the table refers :

Region I : Seine-et-Oise, Oise, Somme, Nord. *Region II* : Ardennes, Meuse, Meurthe-et-Moselle, Vosges, Haute-Marne, Aube, Yonne, Côte-d'Or, Haute-Saône, Saône-et-Loire, Territoire de Belfort. *Region III* : Doubs, Jura, Ain, Savoie, Haute-Sevoie, Isère, Basses-Alpes, Hautes-Alpes. *Region IV* : Alpes-Maritimes, Var, Bouches-du-Rhône, Vaucluse, Ardèche, Gard, Drôme. *Region V* : Lot, Lot-et-Garonne, Gironde, Landes, Basses-Pyrénées, Haute-Garonne. *Region VI* : Corrèze, Aveyron, Lozère, Haute-Vienne, Creuse, Haute-Loire. *Region VII* : Charente, Indre-et-Loire, Loiret, Eure-et-Loir, Sarthe, Mayenne. *Region VIII* : Eure, Calvados, Orne, Seine-Inférieure, Côtes-du-Nord, Finistère, Morbihan.

in that of the industrial households. The figures supplied by the enquiry do not allow the amount of this revenue to be fixed precisely. Its importance in relation to total resources can vary very much from household to household and district to district. This doubtless is the reason that the classification of households by districts seems to give no very important result. In any case however the number observed in each district is too small to make the averages truly representative. We will merely note that in Region I, the district of Nord, the income of agricultural labourers not fed by their employers seems to be higher than elsewhere.

The income in kind exists because most households possess a few bits of land on which they harvest some of the corn or vegetables on which they live and sometimes also keep a cow or a few pigs. In some districts, as in Meuse, a labourer who has no land receives from the landowner the loan of a field on which he grows potatoes or other vegetables. Very often the employer also gives him the firewood he consumes on condition he cuts and houses it outside his working hours. In Orne in some case the drink of families of agricultural labourers is the cider of the second brewing or cider-kin which the employer leaves to the labourers. All this income in kind has perhaps very little importance in the households of labourers fed by their employers, who most often work on a farm continuously, are the farm hands whose whole time, including Sundays, belongs to their employer. This may partly explain the fact that the difference between the earnings of the fed and the unfed labourer often appears to be very slight. The following figures concern 311 households of unfed and 117 of fed labourers and refer only to the earnings in money of the fathers of families.

TABLE II. — *Income of the families of agricultural labourers, fed and not fed by employers.*

		Families of labourers not fed		Families of labourers fed	
		Number of families	Father's average annual earnings	Number of families	Father's average annual earnings
Region	I	93	1180	24	620
"	II	43	825	3	560
"	III	26	818	2	450
"	IV	12	727	1	200
"	V	22	812	2	550
"	VI	17	800	4	575
"	VII	52	766	38	740
"	VIII	46	842	43	606
		311	917	117	650

In the district of Nord the difference between the figures which refer to the two groups appears to represent approximately the cost of food ;

but this does not hold good for most of the other districts. In Region VIII, in particular, the difference is hardly perceptible.

In relation to the importance of income in kind the age of the labourers should be considered. In Region VII, in particular, a sufficiently large proportion of old men, whose earnings are comparatively small and below the average, has been observed. It is in this district — Loiret, Eure-et-Loir Sarthe — that the earnings of labourers fed by their employers seem to be highest, higher even than in the next region, that of Nord. The following figures show the amount of agricultural wages as estimated by the investigators.

In the department of Eure-et-Loir wages were estimated as follows :

Shepherd.	1000 francs a year and food
First carter	1000 " " " " "
General labourer . .	from 500 to 700 " " " " "

These amounts are said on an average to have doubled within thirty years. It is stated that wherever in Oise the custom of feeding employees has been preserved, that is in the western district of the department, the wages of carters and cowmen so fed are between 550 and 700 francs a year; they are between 1100 and 1600 francs in the eastern and south-eastern districts where the men are no longer so fed. In Seine-Inférieure, according to an investigator, the annual wages of a carter so fed are 500 francs and the daily wages of a labourer so fed are 1.25 francs. For Haute-Marne the daily wages are given as follows :

	1881		1913	
	Summer	Winter	Summer	Winter
Journeyman workman fed by employer . .	2	1.50	3	2
" " not fed by employer	3.50	2.50	4	3

In Doubs a farm hind earns from 400 to 450 francs a year while in Aveyron 500 francs are said to represent his minimum.

Generally speaking, agricultural wages are found to have risen notably in the last thirty years, the rate of increase varying, according to the estimates, with districts or with the kinds of labourers, from 30 to 100 per cent. It seems also to be admitted that the circumstances of the labourers fed by employers are usually easier than those of such as are not thus fed; but these conclusions result from estimates which are mainly subjective and it is very difficult to arrive at any such by precise numerical data.

Table III shows for all regions the various elements of the income of all the labourers' households, classified according to the number of their members. The calculation does not apply to the households of labourers not fed by their employers.

TABLE III. — *Families of agricultural labourers not fed by employers.*
Proportional distribution of elements of incomes.

Number of members of a family	Number of families visited	Proportion per 100 francs of total income					
		Father's earnings	Mother's earnings	Children's earnings	Other income	Relief	Total
2	44	74.6	15.3	5.9	3.4	0.8	100.0
3	47	73.5	13.3	9.4	3.0	0.8	100.0
4	57	58.6	14.2	23.4	1.5	2.3	100.0
5	51	70.0	12.3	16.6	0.5	0.6	100.0
6	52	74.6	9.9	12.2	2.1	1.2	100.0
7	28	62.6	11.7	22.4	0.9	2.4	100.0
8 and more	38	51.2	6.6	38.4	0.2	3.6	100.0
	317	66.0	11.7	19.0	1.6	1.7	100.0

These proportions do not differ from those established by the enquiry in the case of industrial workers.

§ 3. METHODS OF EMPLOYING INCOME.

As regards the employment of incomes it would have been impossible to make out for each household an annual complete and detailed budget of expenses. It was necessary to limit enquiry to expenses of certain categories as to which it was possible, simply by questioning those interested, to obtain sufficiently approximate numerical data admitting of verification. Costs of rent, taxes, insurance and the various subscriptions paid to syndicates, to mutual societies or as provision for retirement are easily determined. To calculate the cost of food is more difficult: indications as to a week's consumption have been collected and thus it has been possible not indeed to draw precise conclusions as to the exact importance of the cost of food in the annual budget, but to deduce general data as to the variation of expenses when conditions of households are modified. A special place in the question form was reserved for spirits consumed away from home.

As in studying incomes we will leave out entirely landowning agriculturists who are largely supported by food they grow themselves.

1) *Cost of food.* — The reasons which make it difficult to determine conditions of life among agricultural labourers much diminish the value of the data as to cost of food collected by the enquiry. However by including only households which apparently produce for themselves only the vegetables grown in their gardens, it has been possible to draw up Table

VI which applies to 185 households of agricultural labourers not fed by their employers, distributed over the eight regions already named.

For all these 185 households the average weekly expenditure was 22.28 francs per household and 6.07 francs per personal unit (1). If annual expenditure be taken to be equal to weekly expenditure multiplied by fifty-two, we reach the result that food and drink absorb 81 per cent. of income in these families (2).

TABLE IV. — *Households of Unfed Agricultural Labourers.*
Average Expenditure on Food and Drink in One Week of Winter (francs).

Regions	Number of		Average annual Income	Weekly expenditure on food		Percentage of total Expenditure on Food and Drink						Ratio of expenditure on food and drink to total income
	house- holds	personal units per house- hold		per household	per personal unit	bread	meat and sausages	milk	drink	spices	other food	
I . . .	61	3.6	1,711	25.47	7.03	33.8	20.0	4.2	9.0	7.8	25.2	77
II . . .	19	4.0	1,395	22.57	5.65	31.9	23.6	5.0	11.8	3.6	24.1	84
III . . .	14	3.8	1,297	21.17	5.55	31.0	18.4	3.1	13.9	3.9	29.7	85
IV . . .	10	3.3	1,397	18.00	5.44	28.4	21.7	1.9	14.0	—	34.0	67
V . . .	6	4.0	1,183	20.14	4.99	34.8	21.4	3.2	13.2	—	27.4	88
VI . . .	14	3.7	1,262	17.95	4.91	30.0	19.9	1.7	26.4	—	22.0	74
VII . . .	27	3.1	1,197	20.66	6.67	32.7	16.8	2.0	12.8	3.6	32.1	90
VIII . . .	34	4.0	1,311	21.73	5.41	32.6	16.4	3.0	7.1	9.3	31.6	86
Total	185	3.7	1,431	22.28	6.07	32.6	19.3	3.4	11.2	5.7	27.8	81

The expenditure on food per head varies from 5 to 7 francs a week according to districts, but it should be noted that families belonging to the various districts vary in the amount of their income and in their composition. The largest expenditure takes place in the northern district in which income is highest. Expenditure is relatively large in Region VII (Central West) in which income is small but the average size of the observed families is also small. The average expenditure per personal unit is lowest in Region VI (Central Massif).

Bread absorbs about a third of the expenditure on food. For all the 185 households the percentage of the expenditure which goes to bread is

(1) A child is reckoned to constitute only a fraction of a "personal unit".

(2) The enquiry found that this percentage was only 71 in the case of the households of industrial workers in places comprising less than 10,000 inhabitants; but in these households the expenditure is larger per personal unit, namely 7.45 francs instead of 6.07 francs.

32.6 (1). Meat absorbs about one fifth of the total expenditure, 1.15 francs per personal unit. Of the households considered there are only six in which meat does not occur in the list of articles of diet consumed in the week of observation. Moreover the investigators agree that the use of meat is increasing considerably in country districts. The pig provides most of the meat consumed but many country families also eat butcher's meat, at least once a week. The proportion of meat consumed varies from region to region within fairly narrow limits and is least in the west. Compensation is provided by larger consumption of butter in this region and the use of fish in the coast districts. Contrary to what might be supposed *milk* holds a less important place in the diet of agricultural labourers than in that of industrial workers: in the 185 households it is considered to account for only 4 per cent. of the expenditure. Drink in these households absorbs 11 per cent. of the total expenditure on diet. The percentage varies however with regions, being 7 per cent. in Region VIII (West) in which only cider is usually drunk, 9 per cent. in Region I (North) in which the customary drink is beer, and as much as 14 per cent. in Region IV (South) and 26 per cent. in Region VI (Central Massif) in which wine is consumed.

The percentage absorbed by spirits varies in inverse ratio to that spent on other drinks. It is non-existent or insignificant in districts in which the habitual drink is wine but is considerable in districts in which beer or cider is drunk. Thus in the 34 households in Region VIII (West) spirits absorb 9 per cent. of the total expenditure on diet and 8 per cent. in the 61 households of Region I (North). There is certainly a very close relation between the nature of the habitual drink and the quantity of spirits consumed. In his description of the diet of the labourers of his district an investigator of Eure-et-Loire says: "The drink is cider, a cold drink, and this is the reason why coffee and spirits are so much taken". An investigator of Loiret says, "The labourer generally used to drink wine, but the insufficient vintage of recent years has influenced him to take more and more spirits".

It does not seem that employers make much effort to combat the alcoholism of agricultural labourers.

2) *Various expenses (not on diet)*. — The figures obtained by the enquiry as to expenses other than those on diet are given in the table which follows (Table V) and refer to 315 households of agricultural labourers not fed by their employers.

Of the 315 families, 87 or more than a quarter lived in their own houses, twelve enjoyed free lodging, while the others rented their dwellings, the average annual rent being 107 francs or 8 per cent. of income. The proportion spent on taxation and insurance is much the same as in the case of the industrial families, but that going to contributions to syndicates, mutual societies and provision for retirement is much larger. In certain regions (West, Central Massif) these latter contributions seem to be non-existent or quite insignificant.

(1) For industrial workers the corresponding percentage is 23.4.

TABLE V. — Families of agricultural labourers not fed by employers.
Average amount in francs of certain expenses unconnected with diet.

Region	Number of		Average annual income	Expenses during the week observed (winter)		Annual expenses			
	families	personal units per family		Heating (1)	Light- ing (1)	Rent (2)	Taxes	Insur- ance	Various expenses
<i>Actual figures.</i>									
I	94	3.7	1,760	2.45	0.92	120	8.10	2.48	5.50
II.	44	3.4	1,215	1.55	0.68	82	13.60	6.30	6.70
III	26	3.8	1,180	1.85	0.63	92	8.85	4.15	5.60
IV	12	3.2	1,276	1.93	0.80	119	6.95	1.52	9.00
V	21	3.7	1,180	1.26	0.57	84	15.30	11.65	8.80
VI	18	3.8	1,139	1.56	0.60	100	14.70	4.30	—
VII	52	3.0	1,106	2.12	0.62	93	11.00	3.90	4.35
VIII.	48	4.0	1,221	1.88	0.74	120	5.90	2.90	1.90
Total . . .	315	3.6	1,353	2.00	0.74	107	10.00	4.15	5.15
<i>Percentage of Income.</i>									
I				4.7	1.8	7.0	0.5	0.1	0.3
II.				4.3	1.9	7.4	1.1	0.5	0.6
III				5.2	1.8	9.0	0.8	0.4	0.5
IV				5.1	2.1	7.7	0.5	0.1	0.7
V				3.6	1.6	7.9	1.3	1.0	0.7
VI				4.7	1.8	7.4	1.3	0.4	—
VII				6.5	1.9	8.4	1.0	0.4	0.4
VIII				5.2	2.0	9.7	0.5	0.2	0.2
Total . . .				5.0	1.9	7.9	0.7	0.3	0.4

(1) In calculating the percentages the annual expenditure was estimated by multiplying the weekly expenditure by 52, and reducing the result by a third since it was a week of winter which was observed.

(2) The average rents refer only to families paying rent for their lodgings. The percentages were calculated by taking as a basis the average income of such families.

§ 4. HOUSING CONDITIONS.

Besides the facts as to the amount of rent and expenses accessory to rent the question form for a family contained information as to methods of housing and the composition and size of dwellings.

Of 456 agricultural labourers' families 137 lived in a separate house as proprietors and 288 as tenants, while 31 lodged in houses shared with others. The percentage lodged in their own houses was 30 per cent. of the whole number (as against 5 per cent. in the case of the town workers)

The following table, Table VI, classifies households according to the number of their members and the number of rooms in a dwelling. The kitchen which in many of these households serves various purposes has been counted as a room. An entrance hall, where such existed, has not been taken into account. Eighty per cent. of the families of agricultural labourers had dwellings having less than four rooms each, and 18 per cent. had single-room dwellings. If it be admitted that overcrowding should be held to exist wherever a dwelling contains more than two persons for each room, 37.7 per cent. of the lodgings of agricultural labourers will be found to be overcrowded, and 1,118 or 52.2 per cent. of the 2,227 persons in the 456 households to be living in a condition of overcrowding.

TABLE VI. *Distribution of the families of agricultural labourers according to the number of their members and of the rooms in which they are housed.*

Number of members of a family	Number of rooms in a dwelling									Total
	1	2	3	4	5	6	7	8	9	
2	17	24	18	7	4	—	—	—	—	65
3	10	23	28	11	1	—	1	—	—	74
4	11	25	29	10	2	1	—	1	—	79
5	8	25	25	7	3	—	2	—	—	70
6	17	21	20	10	2	1	—	—	—	71
7	7	13	13	6	1	—	—	—	—	40
8	8	6	9	6	1	—	—	—	—	30
9	—	2	4	3	1	2	—	—	—	17
10	—	2	2	—	—	—	—	—	—	4
11	—	—	1	2	—	—	—	—	—	3
12	2	—	—	—	—	—	—	—	—	2
13	1	—	—	—	—	—	—	—	—	1
Total . . .	81	141	149	62	15	4	3	1	—	456

Table VII gives for the households, classified according to the number of their members, the average area of living rooms in relation to dwellings, persons and personal units, and also the number of dwellings having entrance-halls, their own closets, cellars, lofts and gardens. This table proves that as the number of the members of a household increases there is not much proportionate variation in the average area of the dwelling,

so that the average number of square metres (1) per personal unit diminishes very much.

Twenty seven per cent. of the agricultural households have their own closets. Almost all of them have gardens.

TABLE VII. — *Housing conditions of the agricultural labourers' families.*

Number of persons of the household	Number of households or dwellings	Total number of rooms in relation to			Average number of square metres			Number of dwellings having				
		number of dwellings	number of persons	number of personal units	in a dwelling	for each person	for each personal unit	own closet	cellar	loft	entrance-hall	garden
2	65	2.49	1.25	1.38	44.5	22.2	2.47	17	52	60	10	61
3	74	2.65	0.88	1.08	42.4	14.1	17.3	19	50	62	4	69
4	79	2.67	0.67	0.86	43.5	10.9	14.1	24	43	66	6	69
5	70	2.71	0.54	0.76	46.7	9.3	13.1	21	39	60	6	60
6	71	2.48	0.41	0.61	50.2	8.4	12.2	17	41	56	6	62
7	40	2.52	0.36	0.55	42.0	6.0	9.1	15	26	36	6	37
8	30	2.53	0.32	0.48	50.2	6.3	9.5	4	23	28	2	25
9 and more . . .	27	2.78	0.29	0.42	54.5	5.6	8.0	6	16	25	3	26
Total . . .	456	2.60	0.53	0.74	46.0	9.3	13.0	123	290	393	43	409

The enquiry compared the housing conditions of industrial workers in small places, of town working-people and of agricultural labourers, and established that the last named were the worst lodged.

It was the general opinion of the investigators that the progress in the living conditions of country families in the last thirty years has mainly affected their food and clothes, their housing conditions only in a far less degree. Rural dwellings are still very defective in many districts. In Seine-Inférieure it is not uncommon to find a labourer's cottage consisting of a single dark room, and having mud walls and a roof of thatch. Conditions are no better in Finistère and Morbihan although mention is made of improvements there. In Loiret and Sarthe the state of affairs is from a hygienic point of view very unsatisfactory. Conditions seem to be better in Oise and Meuse. In other districts rural dwellings are found to be adequate as regards area but to be, for the most part, in a deplorable condition hygienically.

(1) 1 square metre = 1.196 square yards.

MISCELLANEOUS INFORMATION
RELATING TO AGRICULTURAL ECONOMY IN GENERAL.

ARGENTINE REPUBLIC.

THE LANDS OF THE STATE DOMAIN. — *Revista de la Sociedad Rural de Cordoba*, year XVI, nos. 317 and 318, Cordoba, June 1916.

The *Direccion General del Censo Nacional* has recently published a statement as to the results of the new general census in 1915 of property belonging to the State. We reproduce the following figures which refer to the extent and value of the lands of the domain.

	Lands of the Domain	
	Area — hectares (1)	Value — pesos (2)
Formosa	7,888,552	63,008,418
Chaco	7,844,383	78,443,838
Misiones	1,271,513	8,900,593
Pampa	1,490,036	11,920,290
Rio Negro	14,123,120	112,984,966
Neuquen	5,667,814	34,006,885
Chubut	18,279,228	91,396,145
Santa Cruz	19,637,877	98,189,388
Tierra del Fuego	1,541,977	9,251,864
Isla de los Estados	51,000	102,000
Los Andes	5,696,600	11,393,200
Total	83,492,100	519,597,587

From these figures it appears that the average prices assigned to a hectare of land in the different territories were as follows : Formosa, 8 pesos Chaco, 10 pesos ; Misiones, 7 pesos ; Pampa, 8 pesos ; Rio Negro, 8 pesos : Neuquen, 6 pesos ; Chubut, 5 pesos ; Santa Cruz, 5 pesos ; Tierra del Fuego, 6 pesos ; Isla de los Estados, 2 pesos ; Los Andes, 2 pesos. If the total value of the land in public ownership in 1915, namely 519,597,587 pesos, be compared with that shown by the census of 1888, namely 244,348,600 pesos, an idea of the increase of the value of land in the Argentine Republic can be formed. However in order fully to appreciate the value of the lands of the State it is necessary to remember that while the value as-

(1) 1 hectare = 2.47 hectares.
(2) 1 peso of gold = 4 s at par.

signed to them in 1888 had to be distributed over 132,173,400 hectares that of 1915 referred only to 83,492,100 hectares, for in the interval 48,681,300 hectares passed from public to private ownership, and therefore the average value of a hectare of the public domain was 6.2 pesos in 1915 and only 2 pesos in 1888.

ITALY.

1. RECENT MEASURES FOR DEVELOPING THE GROWING OF CEREALS. — *Gazzetta Ufficiale del Regno d'Italia*, No. 217, Rome, 19 May 1917.

On 10 May 1917 a decree numbered 788 was promulgated which introduced measures for the encouragement of cereal growing and of agriculture in general. It has five clauses of which the second aims at regulating crops. By its provisions agriculturists may give the Ministry of Agriculture (temporary department for supplies) an undertaking, either directly or by the medium of the provincial commissions of agriculture (1), that they will grow corn, other cereals, vegetables and edible tubercles under an obligation to hand over the produce to the State. If such crops be additional to the ordinary crops of a farm, or be grown in face of exceptional difficulties, the price paid by the State may actually surpass the maximum price established by the State, but not by more than 10 per cent.

Special facilities may be granted for the encouragement of these crops, in the form either of agricultural credit, or the grant of prisoners of war for agricultural labour and of the use of agricultural machines.

Further, according to rules to be established by the Ministry of Agriculture, prefects will have the option of compelling, on the advice of the provincial commissions of agriculture, any person occupying a farm on any title to increase the total area on which he grows foodstuffs — corn, other cereals, vegetables and edible tubercles.

Appeal against such action of a prefect may be made within twenty days to the Minister of Agriculture who will pronounce on the advice of a special section of the technical committee of agriculture. Controversies between the owners and farmers of land, which may eventuate in consequence of the prefect's exercise of compulsion, will be settled by three arbiters, namely the praetor as president and two others chosen by the disputing parties.

Any persons who do not obey the prefect's order to increase cultivation will, for each agricultural season in which they disobey, be fined from 50 to 1000 liras for every hectare of land not under its prescribed crop.

Clause III of this decree contains a series of provisions which aim at eliminating the obstacle which current agricultural contracts place in the way of the more intensive growing of corn and other cereals. Some of these

(1) See our issues for October 1916 (page 118) and February 1917 (page 118).

provisions apply to the whole kingdom, those namely which suspend the validity of contracts limiting sowing, and which allow a farmer to bring under cultivation determined lauds in order to grow on them cereals, vegetables and edible tubercles, and to vary these crops without regard to the customary rotation.

Other provisions affect only the southern provinces, in which the alternatives of production are more uncertain, and guarantee to the cultivator, to any one cultivating under orders and to any one cultivating a property proportionately to the working capacity of his family, even if he have the aid of a paid staff, a proportionate reduction of rent in the case of accidental losses, that is losses due to circumstances impossible to foresee, together with the annulment of accessory clauses in his lease which give him only a small share of profits. The difficulties which the application of these measures may occasion are regulated by three arbiters, charged to effect an amicable arrangement. There is no appeal from these arbiters.

Clause IV contains interesting provisions as to credit for agriculturists who grow the crops which are the object of the new measures. These provisions concern the capital necessary to the granting of loans to them and also the securities necessary to the success of such operations.

As regards capital, appeal is made not only to the special institutions of agricultural credit, but also to the ordinary and co-operative institutions of credit, the ordinary savings-banks, the *monti di pietà* and *monti frumentarii* and the funds for agricultural loans and advances, in order that they may make advances to agriculturists as largely as possible. The appeals are supported by the State's promise to make advances to these credit institutions when it is necessary to supplement their available resources.

As regards securities, the criterion adopted has a certain novelty, for the series of articles on which the legal agricultural privilege can be exercised has been extended, this privilege having the character of a real charge, properly so called, which burdens the property.

Finally large fiscal facilities complete the system of exceptional and privileged treatment to which loans for the crops which have been mentioned are subject.



2. THE NEW ORGANIZATION OF THE MINISTRY OF INDUSTRY, COMMERCE AND LABOUR. — *Gazzetta Ufficiale del Regno d'Italia*, No. 106, Rome, 5 May 1917.

By a recent decree measures have been promulgated for the reorganization of the Ministry of Industry, Commerce and Labour in conformity with the various objects at which the creation of this new ministry aimed (1). The following are the chief provisions of the decree :

(1) See our issue for December 1916, page 135.

The former General Direction of Credit and Thrift is reconstituted on a better proportioned system with bureaux established on larger bases and is called the General Direction of Credit, Co-operation and Private Insurance. The departments for social thrift complete the labour bureau, and the union of these services produces the General Direction of Labour and Social Thrift.

The statistical department, hitherto attached to the labour bureau, again becomes a central autonomous bureau. The general inspectorate of industry and industrial education and the general inspectorate of interior trade are co-ordinated, and a new bureau, the bureau of economic policy and foreign trade, is formed, and centralizes all matters regarding the development of national economy which are not the concern of special services. This bureau must use appropriate means and be aided by research and enquiries, thus supporting initiative tending to develop the various industries and the traffic accessory to them. It must observe the facts of economy, industry and trade.

A large part of its programme is taken up with the study of economic and social measures to have force after the war, and the preparation of the measures necessary to the transformation of war industries into peace industries.

The Bureau of General Economy will soon take on the character of a commercial administrative body.

Finally a general secretariat for the whole Ministry of Agriculture will be responsible for the staff and the complex needs of the working of the two ministries.

* * *

3. INSTITUTION OF A PROVINCIAL LABOUR OFFICE AT RAVENNA. — *Bollettino dell'Ufficio del Lavoro*, Number 8, Rome, 16 April 1917.

The provincial administration of Ravenna recently decided to institute a labour office which should have the following programme (1) : to supplement the action of similar offices in the communes of the province and the action of the government labour office ; to study the conditions of labour and workers, of the various industries and of trade and traffic in the province by compiling statistics ; to study the phenomenon of the interior migration and the emigration abroad of labour and make such proposals as the interests of production and of the workers might suggest ; to see that the laws as to labour and hygiene were applied ; to disseminate among workers the spirit of thrift and co-operation ; to study the phenomenon of unemployment and propose methods for remedying it ; to assist the placing of labour by connecting supply and demand and collecting necessary information ; to intervene for purposes of reconciliation in disputes between

(1) As to the provincial labour office lately constituted at Rome see our issue for April 1917, page 112.

capital and labour ; to follow the development of the organizations of workers and employers ; to analyse social relations as affecting strikes, boycotts and lock-outs, determining the causes of these and resuming their development and results ; to favour the development of the trades schools of artisans and workers, and of new industries, agricultural works, and trade and traffic, in the interests of intensified production and of workers ; and finally to help injured workers to take the necessary steps in order to obtain indemnities.

SWITZERLAND.

FEDERAL AID TO SWISS AGRICULTURE. — *Landwirtschaftliches Jahrbuch des Schweiz.* Heft 3. Berne, Wyss, 1916.

Few branches of federal activity provoked as much criticism and discussion, during the years which preceded the war, in the press and in the federal chambers, as the subsidies granted to agriculture. On the one hand the large increase in the sums voted attracted the attention of political and financial circles, and on the other the subsidies were criticized as being in reality a distribution of money to the large farmers from which the country as a whole drew no advantage.

These discussions, sometimes very lively, attracted the attention of the economists and the federal authorities and provoked a careful examination of the subject. On 23 June 1910 the National Council passed the following resolution: " The Federal Council is invited to submit the whole question of federal subsidies to the examination of a commission of experts and to present a report on the subject ". After a sufficiently long period of examination the commission nominated by the Federal Council presented in February 1913 its report in which the grants to agriculture are examined in detail. Proposals aimed above all at obtaining certain modifications of detail, a more stable obligation to grant the subsidies, their greater social importance, and an extension of authority which would allow the results attained by the means of the subsidies in the domain of agricultural improvement to be controlled.

We should also recall in this connection the studies, entitled " L'encouragement à l'agriculture per la Confédération, de 1851 à 1912 " and " Les améliorations foncières en Suisse " and published by the Agricultural Division of the Swiss Department of Public Economy, on the occasion of the National Swiss Exhibition at Berne in 1914.

Further the question of the grants made to agriculture by the Confederation was the subject of a scientific study by Dr. A. Schmid, agronomic engineer at Berne, published *in extenso* in the German edition of the Agricultural Yearbook of Switzerland, No. 3 (1). Dr. Schmid first

(1) *Landwirtschaftliches Jahrbuch des Schweiz*, Heft 3, Wyss, 1916. — *Die landwirtschaftlichen Massnahmen zur Förderung der Landwirtschaft in der Schweiz, insbesondere die Subvention des Bundes*. A. Schmid, pages 257-356, Berne.

glances at the historical development of these grants, and then establishes the bases for an objective estimate of them, reviewing in the principal part of his work each category of agricultural aids and emphasizing the results which have been obtained.

We here reproduce in summarized form his chief conclusions, which we take from the second part of the French edition of the *Agricultural Yearbook of Switzerland* (1).

A. Progress of Financial Aid granted by the Confederation to Agriculture.

	1885 Francs. (2)	1901 Francs.	1910 Francs.	1914 Francs.
Total amount of all federal subsidies. . . .	1,165,398	7,251,548	12,622,385	16,694,221
Total amount of federal subsidies to agriculture.	217,707	1,827,390	3,202,441	4,681,922

It follows from these figures that if grants to agriculture have much increased, the proportion which they bear to the total sum of federal grants has lessened markedly. Other branches of social activity derive equal benefits from federal subsidies.

When the table showing agricultural grants from 1851 to 1912, which is annexed to Dr. Schmid's work, is studied, it becomes clear which branches of agriculture have benefited most by the increase in the grants. From such an examination the following conclusions are drawn :

a) Whereas until 1890 all agricultural subsidies were kept within very modest limits they increased rapidly after 1895, most of them reaching their maximum in 1910.

b) In several branches of agricultural economy the increase in subsidies has been regular but relatively small (small live stock, agricultural associations, insurance against hail, agricultural instruction and experiments). In others it has been on the other hand very large and very rapid (insurance of live stock, insurance against the pests of vineyards, land improvement). Only subsidies to horse-breeding have lessened continuously since 1898.

c) Subsidies to land improvement, the insurance of live stock, the campaign against diseases of the vine, and cattle-breeding have, especially since 1905, much surpassed those to other branches of agriculture. The indisputable results obtained by subsidies in the spheres of land improvement and cattle-breeding have contributed to their increase. As regards the subsidies to the insurance of live stock and the campaign against di-

(1) *Annuaire agricole de la Suisse*, 2nd part, Berne, Wyss, 1916. — *Les subventions fédérales en faveur de l'agriculture*. Extract from a study by Dr. A. Schmid, published in the German edition of the *Agricultural yearbook of Switzerland*.

(2) 1 francs = 9 $\frac{3}{8}$ d at par.

seases of the vine they are not only an encouragement but also a veritable aid to small agriculturalists to meet losses which they are powerless to prevent and which are a direct menace to their economic existence. These grants are a true social benefit.

The author of the work we have cited has also made a study of the distributions of cash prizes awarded by the federal government to encourage cattle breeding on a large and a small scale in the canton of Berne (1), in which there is a relatively great number of large stock owners. The study has reference to 1913 and ends with the following conclusions :

Distribution of cash prizes to exhibitors winning from 1 to 8 prizes for males and females.

Number of prizes obtained	Percent. of total no. of exhibitors	Percent. of total amount constituted by amount of prizes in each category
1	54.46 %	27.44 %
2	19.26 %	16.91 %
3	10.14 %	11.56 %
4	4.00 %	5.87 %
5	2.92 %	5.06 %
6	2.60 %	6.16 %
7	2.32 %	5.87 %
8	4.30 %	21.13 %
	100.00 %	100.00 %

It is especially in the chief breeding centres that proprietors of the last category are encountered. To have in one's stalls eight heads of live stock is not to be a large proprietor. Farms of this description, having a certain importance, form the centres for serious breeding which are necessary to its methodical and rational pursuit. Therefore the federal subsidies are not, as has often been said, so much money distributed to rich peasants. Especially where cattle are concerned they are useful and render real services.

B. Influence of federal subsidies on agriculture and their future development.

The conclusions reached by Dr. Schmid as to *agricultural instruction, agricultural experiment and research, stock breeding, land improvement, measures for the protection of agriculture, agricultural associations, the Swiss peasants' secretariat, exhibitions, etc.*

To resume the conclusions of the author of this study on all these subjects would take us too far. We will end this notice by giving in tabular form the data as to federal subsidies for the encouragement of agriculture

(1) See table XV. and the remarks on pp. 316 *et seq* of the work cited in the *Landwirtschaftliches Jahrbuch des Schweiz*, part 3, 1916.

from 1851 to 1912, in accordance with the various branches of activity exercised.

	Average annual costs					
	From	1871-80	1881-90	1891-1900	1901-10	1911-12
Agricultural societies	(1) 1859	15,735	37,752	63,600	97,298	110,000
Horses,	(2) 1864	19,777	60,635	354,485	398,217	369,380
Cattle,	1879	3,287	72,129	322,362	497,597	592,534
Diseases of the vine	1879	5,201	92,912	112,997	311,077	758,211
Agricultural instruction . . .	1885	—	73,173	161,643	238,834	286,009
Agricultural experiment, . .	1885	—	16,059	91,411	336,270	409,089
Land improvement,	1885	—	14,750	192,185	574,568	1,500,000
Insurance against hail . . .	1890	—	28,264	106,908	164,760	246,903
Small live stock	1893	—	—	18,720	31,198	49,049
Insurance of live stock . . .	1895	—	—	125,589	512,413	894,456

(1) 1859-60 — 5,000 Fr. (2) 1864-70 — 10,000 Fr.

1861-70 — 15,310 Fr.

RUGGERI ALFREDO, gerente responsable.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXX.
8TH. YEAR: NUMBER 8
AUGUST, 1917.



ROME
PRINTING OFFICE OF THE INSTITUTE
1917

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Part I: Co-operation and Association

UNITED STATES.

FARMERS' CO-OPERATIVE ELEVATORS IN MINNESOTA.

OFFICIAL SOURCE:

DURAND (E. Dana), Chief of Division of Research in Agricultural Economics at the University of Minnesota, and JENSEN (J.P.), Student Assistant: FARMERS' ELEVATORS IN MINNESOTA, The University of Minnesota, Agricultural Experiment Station, Bulletin 164, St. Paul, October 1916.

The development and working of the farmers' co-operative elevators in Minnesota has been the subject of special study on the part of the division of research in agricultural economics in the university of Minnesota.

The facts we give are taken from a bulletin of this division, based on certain of the reports which the co-operative organizations in Minnesota are bound by law to render annually to the State university. The reports in question cover in most cases business done between 1 July 1914 and 30 June 1915.

§ I. NUMBER AND KIND OF CO-OPERATIVE ELEVATORS.

The number of co-operative elevators in Minnesota is gradually increasing. The line of distinction between them and other elevators is not always sharply drawn. It has been deemed proper to include with them all elevators in which farmers own at least 50 per cent. of the capital stock. Under this definition there were 296 co-operative elevators in the State on 1 January 1916, that is about one fifth of the total number of elevators and local mills buying grain from farmers.

The Minnesota Railroad and Warehouse Commission, to which all elevators and other concerns handling grain are required to report, includes in its list of local establishments mills buying grain from farmers as well as elevators proper. On 1 January 1916 this list included 1,428 concerns,

of which however it is probable that a few had been closed and a few were mentioned in duplicate owing to change of ownership. Terminal elevators were not included. Of the 1,428 concerns 248 were mills and therefore 1,180 elevators proper, and almost exactly a fourth of these last were co-operative elevators.

The elevators are classed as co-operative, line and individual. Line elevators are those owned by concerns having headquarters in central markets, while "individual" is the term used to designate the elevators locally owned which are not co-operative, even if, as in a good many cases, they are owned not by individuals but by firms or even corporations.

The elevators in the 73 counties of the State were classified as follows :

Co-operative elevators	296
Line elevators	625
Individual elevators	302
Mills	205
<hr/>	
Total	1,428

While some of the 296 elevators called co-operative do not possess all the characteristics and pursue all the practices generally considered appropriate to co-operative enterprise, they are all substantially controlled by farmers; and the large majority possess some, and many all, of the customary characteristics of a co-operative organization. In most of them each stockholder has one vote, whatever amount of capital stock he may own. In many of them there is a limit to the number of shares of stock one person may own. In a considerable number the dividends on stocks are limited and the remaining profits are distributed on a patronage basis.

Of the 296 co-operative elevators information as to the year in which they were organized is available for 204 and is given in Table I. In a good many cases the present officers of farmers' elevators do not know when their elevator was organized. The significance of the reports is affected in some other cases by the fact that one or more reorganizations have taken place, and it is not certain whether the date given is that of the first organization or the latest reorganization. Nevertheless the table gives a fair idea of the growth of the co-operative elevator system in the State. The great majority of elevators have been organized since 1900. One dates back to 1876 and another to 1884, but the total number reported as organized before 1900 is only thirty. Marked activity in the formation of co-operative elevators appears from 1904 to 1906 and again from 1912 to 1914, the years 1912 and 1913 showing a greater number organized than any others. Comparatively few seem to have been organized in 1915, but this may be partly due to the absence of reports from the newest concerns

TABLE I. — *Year of Organization of 204 Co-operative Farmers' Elevators*

Year	Number of Elevators	Year	Number of Elevators
1876	1	1901	6
1884	1	1902	2
1885	2	1903	6
1886	1	1904	10
1887	1	1905	16
1889	4	1906	16
1890	2	1907	7
1893	2	1908	9
1894	3	1909	11
1895	2	1910	10
1896	3	1911	15
1897	3	1912	22
1898	4	1913	21
1899	1	1914	14
1900	4	1915	5

As would naturally be expected there are in general more co-operative elevators in regions of large grain production than elsewhere. The south-western part of the State grows more grain than any other except the Red River Valley, and co-operative elevators are particularly numerous in it. In the Red River Valley however, a great grain region, they are comparatively few. Their small number in counties adjoining the Twin Cities and in the entire north-eastern part of the State is chiefly attributable to the small local grain production. The earliest co-operative grain elevators in Minnesota appear to have been organized in the middle western counties.

§ 2. ACTIVITY OF THE CO-OPERATIVE ELEVATORS.

a) *Quantity of Grain Received.* — The 1,428 local elevators and mills buying grain from farmers reported to the State Railroad and Warehouse Commission that they handled approximately 112,000,000 bushels of grain during the season 1914-1915. *Of this amount the co-operative elevators handled over 43,000,000 bushels or nearly two fifths.*

The proportion of the business in grain done by the co-operative elevators varies greatly in different parts of the State. In one county, Clearwater, it is all done by them. On the other hand in fifteen counties no co-operative elevators are reported to exist. In several of the counties of south-western Minnesota, all important in grain production, the co-operative elevators do half of the business or more, but they do as much as 50 per cent. in only few of the counties of south-eastern, central or north-western Minnesota.

It does not appear that there is a very close relation between the date at which farmers' elevators were first organized in a given county and the proportion of the business they now control there ; but the fact that in the south-eastern part of the State and in the Red River Valley generally they have much less than half of the total business may possibly be connected with the fact that comparatively few of them were organized in these regions before 1900. No sufficient information is at present available to indicate the reasons for the variation in the relative importance of co-operative elevators in the several parts of the State. Doubtless it is affected to some extent by the nationality of the farming population, by the degree of mixture of different nationalities, and by the policies of the non-co-operative elevators in dealing with grain growers, as well as by numerous other factors.

It is noteworthy that the co-operative elevators are larger than the other concerns or at any rate do a larger volume of business. As already stated the 296 elevators classed as co-operative handled 43,489,000 bushels in 1914-1915 or an average of 148,000 bushels each. Approximately 1,130 other elevators and mills buying grain from farmers handled about 68,000,000 bushels, or an average of 60,000 bushels each. If mills were excluded the average for proprietary elevators would perhaps be somewhat larger, but it is safe to say that on an average each co-operative elevator does at least twice as much business as each proprietary concern. Although no information is available as to the cost of operating proprietary elevators, it seems probable that, on account of their smaller business, their expenses per unit of grain handled are higher than those of the co-operative elevators.

b). *Membership.* — Although the reports were not complete, the total number of stockholders using the elevators in 1915 may be placed approximately at 33,000 or an average of about 112 to a company. There are however an average of eighty-five persons for each elevator, or a total for all the elevators of about 25,000 persons, who make use of them and yet are not stockholders. This brings the total number of persons using them to about 58,000 or an average of nearly 200 for each elevator. The total number of farmers in the State in 1910 was about 156,000. As it is probably little changed, considerably over one third of the farmers may be said to do business with the co-operative elevators.

c) *Capital Stock and Gross Receipts.* — Practically all the farmers' elevators are organized as stock corporations, mostly under the general corporation law and not the special law authorizing the organization of co-operative corporations. The amount of capital stock varies greatly and is by no means always proportionate to the volume of business. Table II classifies according to the amount of their stock thirty-eight companies which reported on this point. The average capital stock for all the companies is about \$65,000

TABLE II. -- *Relation of Capital Stock to Gross Receipts.*

Classification (according to gross receipts)	Number of elevators	Percentage of capital stock to gross receipts		
		Maximum	Minimum	Average
Less than \$ 50,000	5	59.0	4.8	25.0
\$ 50,000 to 100,000	10	11.3	4.2	5.8
100,000 to 150,000	12	6.7	2.3	4.8
150,000 to 200,000	6	4.6	2.1	3.1
Over 200,000	5	8.0	2.6	4.7

On an average the capital stock is equal to 5 per cent. of the gross receipts. In few if any cases is the co-operative elevator fully financed by the subscribed capital stock. Other sources, such as banks, individual lenders and commission men, generally provide the greater part of the working capital, the capital stock being usually intended to cover the cost of the plant and equipment.

d) *Gross Receipts and Operating Expenses.* — It is interesting to compare the ratio of operating expenses to gross receipts from all sources, for the companies classified according to the volume of their business. This is done in Table III on the basis of the reports for the year 1914-1915: Figures sufficiently complete and accurate were available in the case of only 166 elevators, but their conditions are probably substantially representative of those of all the co-operative elevators. They are classed in eleven groups, according to the volume of their business as indicated by their gross receipts. It will be seen that 107, the large majority, have gross receipts ranging from \$50,000 to \$150,000 a year. The average gross receipts of the 166 elevators amount to \$122,000. On an average operating expenses amount to 2.6 per cent. of gross receipts. While within each class of elevators the ratio of expenses to receipts varies widely, in nearly all cases the column showing the highest ratio of operating expenses to gross receipts indicates a fall in this ratio with each increase in the volume of business. It will be noted that after the limit of \$150,000 of gross receipts has been passed there is no considerable change in this ratio until the class of elevators having gross receipts in excess of \$275,000 is reached. In other words, as the business increases from a very small to a moderate size the ratio of expenses falls rapidly, but with further increase in volume it naturally becomes more difficult to effect the comparative reduction of expenses. Volume is not the only element which effects the ratio of expenses. The kind of business done is also, doubtless, a factor of some importance. Elevators which handle relatively more of the products necessitating considerable expense will naturally have comparatively higher working costs than

those which deal chiefly with products easily handled. The skill of individual managers also of course accounts for much.

TABLE III. *Relation of Operating Expenses to Gross Receipts.*

Classification (according to gross receipts)	Number of elevators in each class	Percentage of operating expenses to gross receipts		
		Maximum	Minimum	Average
\$ 10,000 - 50,000	15	16.2	2.8	5.3
50,000 - 75,000	27	9.6	2.1	3.6
75,000 - 100,000	30	7.0	1.9	3.3
100,000 - 125,000	24	5.0	1.8	2.7
125,000 - 150,000	26	3.8	1.4	2.2
150,000 - 175,000	13	3.5	1.1	2.0
175,000 - 200,000	9	2.9	1.5	2.1
200,000 - 225,000	6	3.4	1.1	2.2
225,000 - 250,000	6	2.7	1.5	2.1
250,000 - 275,000	5	2.7	1.4	2.0
275,000 and over	5	3.3	1.0	1.6
All classes	166	16.2	1.0	2.6

e) *Profits.* — Profits as such — an excess of total income over total outgoings — are not necessarily desirable for a co-operative organization. The object of a strictly co-operative marketing business is to enable the co-operators to obtain the highest possible amount for the goods they market; and whether this is accomplished by paying them directly the whole price obtained, less expenses, or by retaining a share of such price for subsequent distribution in the form of dividends, is immaterial. It is the practice of the co-operative creameries to pay for butter-fat the whole current price at which the butter sells, less actual working costs, so that at the end of the year little or no profit remains to be divided.

Such a policy is however scarcely practicable in the case of the co-operative marketing of grain, particularly because of the considerable and rapid fluctuations of the price of grain which often take place, and the considerable occasional variations in working expenses which are due to the varying volume of business. It is desirable that the co-operative elevators should retain, after paying suppliers of grain and immediate working expenses, a margin of receipts. This serves as a safety fund.

As a matter of fact, not all the farmers' elevators are strictly co-opera-

tive in their methods of doing business. A good many of them are controlled by stockholders who desire as high returns as possible on their investment, and a good many do not limit dividends.

In the case of 169 elevators reporting on this point the average profit was 2.7 per cent : it varied from 1.9 per cent. for the nine having gross receipts between \$ 175,000 and \$ 200,000 to 3.5 per cent. for the seven having gross receipts between \$ 225,000 and \$ 250,000. It may perhaps be concluded on the whole that the smaller elevators tend to require a somewhat greater proportion of profit than the larger. This may be due to the fact that elevators doing a small volume of business require relatively more investment per unit of business than those doing more, and in order to obtain an equal rate of return must collect a larger rate of profit on business handled.

The methods of distributing profits in the form of *dividends* vary very much. Where sufficient profit is made to declare any dividend a stock dividend is almost invariably paid. Of the 296 elevators we are considering 72 made no statement as to their disposition of profits, 36 reported that they paid no dividend of any kind, 111 that they paid dividends on stock only, and 77 that they distributed their profits among those delivering grain. Of these 77 all but one paid a stock dividend before any distribution was made on business done.

Table IV shows the rates of dividends on stock paid by the 147 elevators which reported and which did not pay dividends to those delivering grain.

TABLE IV. — *Dividend Rates on Capital Stock.*

Rate %	Number of elevators	Rate %	Number of elevators
0	36	20	12
1	2	25	5
5	5	28	1
6	4	30	4
7	6	32	1
8	16	40	2
8 $\frac{1}{8}$	1	43 $\frac{1}{2}$	1
10	36	50	3
12	1	100	5
15	4	250	1
16	1		

Thus of the 147 elevators 76 distributed 10 per cent. or more of their capital stock in dividends and 36 paid no dividends at all.

Probably some of the very high dividends represent in part the earnings of earlier years or are due to the fact that the capital stock is only a small part of the actual capital of the companies. In some cases the high dividends are justified because for many previous years no dividend or only low and irregular dividends have been declared. However there is little doubt that a high return to capital is put by a good many elevators before the interests of those supplying the grain.

About 77 elevators reported paying to the latter a dividend, called a "patronage dividend". The apportionment of patronage dividend admits of many variations. Some elevators limit its distribution to stockholders, while others, apparently more numerous, distribute it to all customers. A variation in this practice, which is however rare, is to pay a patronage dividend to stockholders at double the rate at which it is paid to non-stockholders. In all except possibly one of the cases in which elevators pay a patronage dividend, there is a limit placed on the stock dividend which may be paid. This limit varies from 2 to 15 per cent., but 10 per cent. seems to be the most general figure and is apparently held to represent a just return, in the circumstances, on the capital invested. In general there seems to be no evidence that the claim of stock to dividends is cumulative. The patronage dividend is distributed according to several different systems. There is first the straight dividend, distributed on the basis of the value of the business done, whether it has been buying or selling. Where buying and selling are done on approximately equal margins this method seems to be adequate. Another practice is to pay a patronage dividend as a percentage on the value of business, on grain and flax only; and where other commodities are distributed at a lower profit than grain and flax this method may be justified. According to yet another method the dividend takes the form of a specific number of cents per bushel of grain, the difference in the value of the different kinds of grain or the profit on them per bushel being sometimes disregarded. Such a dividend may be distributed on other commodities than grain and flax, such as coal, flour and fodder.

The actual amount of patronage dividends naturally varies very much. The highest rate reported is 5 per cent. on business done; and unless peculiar local conditions necessitate transacting business on a larger margin there is no good reason why this rate should ever be exceeded. Rather than surpass it, farmers should be paid higher prices for their products or be allowed to buy commodities more cheaply, so that too much money would not be tied up in the funds of the elevator.

In general it can be said that in the countries in which the practice of paying a patronage dividend prevails, the percentage of foreign-born citizens and citizens having foreign-born parents is considerably above the average; and it is suggested that these citizens may have become familiar with this practice in Europe and have continued it. As a rule the larger

and more successful co-operative elevators are those which pay patronage dividends.

It will be remembered that only 55 per cent. of all the patrons of elevators are stockholders. In the case of many elevators this percentage is much less, several of them reporting their non-stockholding to be far more numerous than their stockholding patrons. When in such a case a large stock dividend is declared — as happened in several instances — the returns from products handled for patrons are not distributed in strict accordance with co-operative principles.

TABLE V. — *Dividend Rates for Elevators paying Patronage Dividend to all Customers.*

Elevator number	Stock dividend paid	Patronage dividend to all customers
	%	%
1	10	1.3
2	10	1.7
3	10	2.0
4	8	2.5
5	8	2.5
6	8	4.0
7	6	3.0
8	5	3.75
9	5	4.0 (Paid to stockholders only)

f) *Gross Margins.* — The average gross margin between price paid and price received for products handled by all elevators reporting on this point is 5.3 per cent. of the gross receipts, the proportion varying from 8 per cent. in the case of elevators having gross receipts less than \$50,000 to 4 per cent. in some of the larger classes. For all the reporting elevators the gross margin is almost equally divided between profits and expenses, 51 per cent. going to the former and 49 per cent. to the latter. For the three classes which have the smallest volume of business, however, the expense constitutes over one half of the margin; for all but two of the other classes less than half the margin. In the case of elevators having gross receipts over \$275,000 the expense forms only one third of the margin and the profits two thirds. It is evident that co-operative elevators having a small volume of business must find it more difficult to compete with non-co-operative elevators than those having a large volume of business. Because their expenses are relatively higher, and because they must seek a larger ratio of profit on sales, their gross margins must be materially higher than those

of the larger elevators ; and since they can hardly sell their grain for more, this means that they must pay farmers less.

g) *Capacity of Elevators.* — The capacity of the co-operative elevators varies considerably, the average being about 22,750 bushels. Some elevators have a capacity of as much as 50,000 bushels, and there is a tendency to replace with larger structures the older and smaller elevators which become unprofitable in course of time.

The average quantity of grain and flax handled by these elevators in 1914-1915 was five and a half times as much as their average capacity.

§ 3. COMMODITIES OTHER THAN GRAIN HANDLED BY THE CO-OPERATIVE ELEVATORS.

The majority of the co-operative elevators handle commodities other than grain. They distribute more or less frequently coal, seeds, fodder, twine, wood, tile, salt, flour, lumber, cement, oils, fencing and machinery. Of the entire number of elevators 24 reported that they handled nothing but grain and flax, and 149 specified that they handled other products than these.

TABLE VI. — *Farmers' Elevators buying Commodities for Patrons.*

Commodity	Number of elevators
Coal	112
Fodder	88
Flour	71
Twine	51
Salt	30
Seeds	17
Machinery	13
Wood.	9
Lumber	9
Tile	8
Cement	4
Fencing	3
Oil	3

Table VII classifies the 173 co-operative elevators reporting on this point according to the proportion of their total receipts derived from sources other than grain and flax. The receipts from these other sources of two fifths of these elevators exceeded 10 per cent. of their total receipts ; those of twenty-three of them exceeded 20 per cent. of their total receipts.

TABLE VII. — *Percentage of Gross Receipts from Commodities other than Grain and Flax.*

Per cent.	Number of elevators
More than 50	1
40 to 50	5
30 to 40	6
20 to 30	11
15 to 20	12
10 to 15	24
5 to 10	50
Under 5	40
None	24
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It appears that those elevators which handle relatively large amounts of commodities in addition to grain and flax require, on an average, a slightly larger gross margin than do others.

RUSSIA.

THE RUSSIAN CO-OPERATIVE MOVEMENT DURING THE WAR.

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§ I. THE DEVELOPMENT OF CO-OPERATION IN GENERAL.

The war has given a vigorous impulse to co-operation in Russia where since the outbreak of hostilities the co-operative movement has been exceptional in the history of the world. A mere comparison of the data for 1914 with those for 1916 shows very clearly the importance of this development.

As appears in the following table the number of co-operative societies of certain categories has been almost doubled while that of those of all categories has increased by more than 60 per cent.

TABLE I. — *Number of Co-operative Societies from 1914 to 1917.*

Kind of Societies	Number of Societies in the year				Percentage of increase in Number of Societies	
	1914	1915	1916	1917	1914	1917
Co-operative credit . . .	12,985	14,586	15,436	16,055	100	182
Co-operative consumption	10,080	12,000	18,000	20,000	100	198
Agricultural . . . , . .	4,707	5,795	5,820	6,132	100	176
Co-operative agricultural	1,278	1,278	1,981	2,100	100	161
Co-operative butter factories	2,000	2,000	2,500	3,000	100	166
Total . . .	31,050	35,659	43,737	47,287	100	166

As regards the number of members there were about ten millions of them on 1 January 1914. If the population of Russia be taken to be 172 millions, 5.8 per cent. of them are co-operators. If to these be added the other members of co-operators' families, on an average six persons for each, it is found that 34.8 per cent. of the population are closely connected with the co-operative movement.

In 1916 the number of members increased in an extraordinary way. A figure of no less than fifteen millions was reached or, if members of co-operators' families be counted, 67,500,000; which is to say that 39 per cent. of the population were interested in the co-operative movement.

The detailed analysis of the movement is even more striking, especially if co-operation for credit and consumption be considered in particular.

§ 2. CO-OPERATIVE CREDIT.

The most important branch of Russian co-operation is without doubt co-operation for credit. On 1 January 1917 there were 21,263 institutions of small credit distributed as follows: 11,810 credit societies; 4,245 savings and relief funds; 76 unions; 4,860 small credit funds belonging to the zemstvos.

If these data be compared with those for 1915 and 1916 the following table, showing the development of institutions of small credit during the war, is obtained:

TABLE II. — *Number of Institutions of Small Credit from 1915 to 1917.*

Institutions of Small Credit	Years		
	1915	1916	1917
<i>Co-operative Institutions:</i>			
1) Credit and Savings	3,515	4,042	4,245
2) Credit	9,516	11,412	11,810
3) Credit Unions	11	62	76
<i>Non-co-operative Institutions:</i>			
1) Funds of the Zemstvos.	203	248	272
2) Special Funds	5,192	4,998	4,860

We have added to the co-operative institutions of credit the small credit funds of the zemstvos, for these discharge almost exclusively the task of unions of co-operative credit institutions. In this connection the grave question has lately arisen of limiting the fields of action of the unions and the small-credit funds.

As appear from Table II the total number of co-operative credit institutions has certainly increased, but not very markedly. Thus in 1914

1482 new co-operative institutions were organized, only 888 in 1915 and 601 in 1916.

This relatively weak development is explained by the fact that during the war co-operation for credit has directed all its efforts towards organizing unions, by means of which it has been able to exercise a multiple and intense activity. The large decrease in loans to members and the increase in deposits have allowed the members to develop a series of various forms of co-operative action which did not previously exist. Co-operation for credit has been drawn into the sphere of co-operative consumption, has taken a very active part in supplying the army with various products, and has participated in a growing movement for the creation of co-operative industries. At the outbreak of war only eleven unions, or one for every 1,324 societies, existed; but in 1916 they already numbered sixty-two, that is one for every 249 societies; and on 1 January 1917 there were eighty-eight of them — twelve being mixed unions — that is one for every 181 societies. This increase would have been far larger had twenty-five other unions, who applied to the competent authorities for authorization during 1916, been authorized to begin operations.

On the basis only of very incomplete data, which are below the actual level reached, it can be concluded that the unions for co-operative credit supplied to the army in 1915-1916 the following quantities of agricultural products :

41,427,544 puds (1) of corn ;	5,734,684 puds of hay ;
2,488,798 " " flour ;	272,663 " " buckwheat.

The co-operative institutions of the province of Charkov alone supplied hay, sacks, leather, buckwheat, etc. to the value of more than two million roubles (2) ; and those of Astrakhan about twenty million roubles' worth of fish.

At the same time co-operation was driven to set up factories for the construction and repair of agricultural machines and implements. This form of co-operative production was provoked and stimulated on the one hand by the lack of agricultural machines which resulted from the difficulties of importation, and on the other by the increased demand for machines arising from the insufficiency of labour caused by the mobilization. The co-operative credit institutions had therefore to organize factories and workshops for the making of agricultural machines and implements.

Their unions took the lead in this enterprise because they could most easily find the necessary capital. Co-operative industrial activity did not however confine itself to making the machines necessary to agriculture : it began to fabricate other articles, especially those for which agriculture furnishes the primary material.

Mills were set up and also machines for the essication of fruit and vegetables.

(1) 1 pud = 40 lbs.

(2) 1 rouble = 'about 25 rd. at par.

In 1914 and 1915 these miscellaneous undertakings were as follows :

TABLE III. — *Various Co-operative Activity in 1914 and 1915.*

Operations	1914		1915	
	Number of Societies	Total Sum. — roubles	Number of Societies	Total Sum. — roubles
Supply of agricultural machines. . .	2,472	9,727,400	3,105	13,094,600
Supply of live stock	53	130,600	74	500,100
Seeds	756	2,569,400	1,177	5,172,500
Forage	350	1,598,000	754	4,147,600
Letting lands	94	631,500	50	263,400

The credit granted by the State to institutions of small credit amounted on 1 January 1917 to 397 millions roubles, of which 358 million roubles had been granted to co-operative institutions of credit.

The number of members on 1 July 1916 was 10,378,913; namely 2,324,988 members of credit and relief societies and 8,053,925 members of co-operative credit institutions. The increase in 1914 was of 1,200,000; in 1915 it was only of 100,000.

The capital of which the institutions of small credit could dispose was distributed as follows.

TABLE IV. *Percentage of Capital at the Disposal of the Institutions of Small Credit of various Categories.*

Kinds of Capital.	Credit and Relief Societies.	Co-operative Credit Societies.	Co-operative Societies of the two Forms.
Capital belonging to the Societies	22.8	13.7	17.9
Capital of the State . .	6.0	13.2	9.6
Capital of the Zemstvos	1.6	4.6	3.3
Deposited capital . . .	67.2	65.4	66.3
Other capital	2.4	3.4	2.9

Total . . . 361.280.000 554.314.000 915.544.000 roubles

§ 3. CO-OPERATIVE CONSUMPTION.

The total number of co-operative institutions for consumption reached 18,000 on 1 January 1917 while before the war it was barely 10,000, the increase being thus one of nearly 100 per cent. In European Russia the increase was of 98 per cent., in Siberia of 99 per cent., in the Caucasus of 164 per cent., and in the Transcaspian provinces of 171 per cent. In certain provinces the percentage of increase was very high: in the province of Nijni-Novgorod it was 709; in the province of Charkov 447.

The development of co-operation for consumption in the other chief States of Europe was as follows :

TABLE V. — *Number of Co-operative Institutions of Consumption in the Chief States of Europe.*

Country	Total Number of Institutions
Great Britain	1,375
Germany	2,500
Denmark	1,562
Switzerland	736
Italy	2,570
France	3,156
Total.	11,899

It is reckoned that in other countries there are about 8,000 co-operative institutions of consumption. The total number of them in Europe outside Russia therefore hardly surpasses that in Russia only. The total number of members was five millions, and if members of co-operators' families be counted no less than 25 millions of the inhabitants of Russia will be found to be included in the co-operative movement.

It is interesting to compare this with the development of co-operative consumers' societies in the rest of Europe.

TABLE VI. — *Absolute and Comparative Figures as to the Development of Co-operative Institutions of Consumption in the Chief States of Europe.*

Countries.	Number of Members.	Percentage of Population who are Members.	Percentage of Population who are interested in Co-operation.
Great Britain. . .	3,362,000	8.0	32.0
Switzerland . . .	523,000	14.0	56.0
Denmark.	243,000	8.0	35.0
Germany.	2,500,000	3.6	14.5
France	876,179	2.1	8.4
Italy	500,000	1.4	5.6
Russia	5,000,000	3.0	15.0

This importance and development of the movement towards co-operative consumption in Russia has a direct relation to the war. Co-operation in consumption did not arise when the war broke out nor was it a consequence of the war. The work of propaganda and organization certainly went on for twenty years. But the true success and veritable national importance of this form of co-operation date only from quite recent years and are a result of the pressure exercised by the crisis in the food supply. According to information, very incomplete and therefore below the truth, which dates from 1916 the turnover of this branch of co-operation was then fifteen hundred million roubles.

A movement parallel to that of co-operation is found in the organization of unions of districts, provinces, regions and of a central union. On 1 January 1917 the unions of co-operative institutions for consumption numbered 250, of which 170 had been formed in the previous year. They are largely mixed in type and unite co-operative institutions of various categories.

The number of co-operative institutions belonging to the unions has increased at an exceptional rate. The Union of Co-operative Societies of Moscow, which is becoming the centre of co-operative consumption in Russia and is on the point of solving the problem of forming a single national co-operative institution for consumption, had 1,734 members in 1915 and 3,164 in 1916. The membership of the Union of Vologda increased from 222 to 600; that of Perm, which was formed of thirteen societies in 1912, included 500 of them in 1916, 308 having joined during 1916, etc.

The total number of co-operative societies grouped in the unions was 4,000 on 1 January 1916 and 12,500 on 1 January 1917, which is to say that no less than 60 per cent. of the co-operative consumers' societies have adhered to the unions. The turnover of all the unions was 257 million roubles on 1 January 1917 as against 70 million in 1915. The Union of the Co-operative Societies of Moscow should be signalized, its turnover having surpassed even optimistic anticipations. In 1914 the value of the goods it sold was 10 million roubles, in 1915 it was 22.8 million roubles, in 1916 it surpassed 85 million, and this year it will, on a modest computation, reach 145,568,500 roubles, thus placing the union in the first rank of the co-operative stores of the whole world.

As appears from the following table the large majority of Russian co-operative societies are rural. To analyse in detail the activity of the Central Union of Russian Co-operative Societies, by which name the Union of Moscow is now known, is therefore of the highest importance for the study of the economic and commercial life of the Russian country.

TABLE VII. — *Relation between the whole Number of Co-operative Institutions and those of the Various Categories.*

Categories	Total Number	Percent of Total
Co-operative Urban	486	
" Rural	2,063	73 %
" Factory	220	
" Special	51	
" Labourers	50	
" Railway	30	
" Various	114	
Unions of Co-operative Institutions	154	

The Muscovite union expects in the current year a turnover of 145,568,500 roubles, distributed as follows: commercial action 131,420,000 roubles; production 11,131,000 roubles; propaganda action 3,017,500 roubles. In comparison with the results of previous years these previsions are moderate for they involve an increase of only 68 per cent. Their moderate character is confirmed by the results of the first years. The increase was of 122 per cent. in 1915 and of 280 per cent. in 1916.

Another circumstance should be noticed. In 1916 co-operative consumption organized itself for the first time and on a large scale. It founded one chemical establishment; four soap factories; four factories of confectionery; four establishments for the treatment of leather; tobacco, match, preserved fish and paper factories; establishments for the treatment of wood and sunflower oil; mineral water works, printing-presses; and a number of mills. The anticipations of the Central Union left out of account the large mills bought in the first months of 1917 and a number of enterprises of various kinds.

On parallel lines to this organization, which operates from outside inwards, that operating from inside outwards has grown and been reinforced during the war. The Central Union founds, at points chosen in advance and likely, owing to their geographical position, to be active trading centres, a number of agencies having stores for wholesale goods, and these agencies form nuclei always closely connected with the Central Union. They have the double aim of supplying the co-operative institutions with wholesale warehouses, and buying local products for the Central Union without the intervention of middlemen. Middlemen used more than any other element to burden enterprise in Russia.

There were seven of these agencies in 1916 and twelve in 1917. Their turnover in 1916 was very large, that of the Agency of Rostov being 257 per cent. of its amount in the previous year, that of the Kiev Agency 179.8 per cent., that of the Odessa Agency 255.5 per cent., that of the Rybinsk Agency 589 per cent., and that of the Astrakhan Agency 2,351 per cent. For the current year a turnover of 44,700,000 roubles is anticipated,

The activity of the Central Union as regards the fish trade deserves special attention. In 1917 it bought two large refrigerators, a steamer and ten barges which it had built on purpose for the transport of fish, thus preparing for the sale of 250,000 puds of fish emanating from European Russia. It also organized the purchase in Siberia.

What is even more interesting is the great success which met the union's effort to concentrate the trade in butter, cheese, eggs, pork, etc.

§ 4. CO-OPERATIVE AGRICULTURE.

On 1 January 1915 there were 1,768 agricultural co-operative institutions. On 1 January 1916 their total number was 1883 and on 1 August 1916 it was 1981. Thus in one year it increased by 213 or 12 per cent. Most of the new institutions, that is 91 out of the 158 formed in 1916, are collective dairies. The slight development of agricultural as compared with other co-operative institutions is entirely symptomatic. In this branch of co-operation an increase above the normal rate was provoked by the war as elsewhere. On 1 January 1914 there were 1316 of these institutions, and on 1 August 1916 there were 1981 of them, so that the increase during the war was of 665 or 50.6 per cent. In spite of their almost absolute lack of technical and financial aid, agricultural co-operative institutions have shown their solidity and their great power of resistance to economic and social repercussions. Their initiative has however been checked by their lack of means of their own, which has constrained them to borrow a sum more than six times the amount of their capital-shares and reserve fund.

§ 5. CO-OPERATIVE BUTTERMAKING.

The statistics of co-operative buttermaking are among the most incomplete. The most exact refer to eight provinces — Arkangelsk, Vologda, Viatka, Kostroma, Novgorod, Olenetzk, Perm and Jaroslav — and give the following data as to the development of co-operative butter-factories:

TABLE VIII. — *Numerical Increase of Co-operative Butter Factories in Eight Provinces from 1914 to 1916.*

	Year			Percent. of Increase
	1914	1915	1916	
Co-operative institutions in general	4,302	4,895	6,528	34
Co-operative butter-factories . . .	286	408	540	47

As to co-operative butter-factories in Siberia we have the following data. In the province of Tomsk there were 114 of them in 1914, 497 in 1915 and 1038 in 1916; in the province of Tobolsk there were 1200 of them in

1916. The unions had a really exceptional development. During the war twenty-seven unions were formed in Siberia where before the war there were only three of them. Of these twenty-seven, ten were unions of co-operative butter factories. The tendency to centralization was however affected by many and various repercussions tending to produce a crisis in the work of organization. In 1915 the Union of Altai, comprising 100 societies, left the Siberian Union which now comprises 800 societies; and during the last months of 1916 another autonomous union was organized at Kurgan. Besides these associations there were many in the provinces of Moscow, Orenburg and Oufa. There were 3,000 co-operative buttermaking associations in all Russia in 1916.

Latterly the question of the organization of the National Central Union of Co-operative Buttermaking Associations has arisen, for the Siberian co-operative factories have begun to extend their sphere and to make butter not only for exporting abroad but also for the home market. Dangerous competition in the field of commerce with the Union of Vologda has thus arisen.

Another question, much discussed, involves the work of various branches of co-operation, the question namely of the National Co-operative Union for the Export of Corn. A further step for the development and reinforcement of Russian co-operative enterprise is about to be made here this year.

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NOTICES RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

AUSTRIA.

BERICHT ÜBER DIE TÄTIGKEIT DER K. K. LANDWIRTSCHAFTSGESELLSCHAFT
IN WIEN WÄHREND DER KRIEGSZEIT 1914, 1915 UND 1916 (*Report on the Activity
of the Imperial and Royal Agricultural Society in Vienna during Wartime 1914, 1915 and
1916*). — Published by the Zentral-Ausschuss (*Central Council*) and edited by the General
Secretary, Professor J. Häusler. 43 pp. Vienna 1916.

Owing to financial reasons and a diminished staff the Imperial and Royal Society of Agriculture of Vienna has suspended for the period of the war the publication of its yearbook, and issued instead a brief report on the society's activity from the outbreak of war until the end of July 1916. In the first part of this report the activity of the Central Council and the sections is examined, in the second that of the various offices.

Since the beginning of the war the society has been occupied by questions relative to the work necessary to saving the harvests which the lack of labour has jeopardized, and to this end has become part of organisms created by the government, and studied the problems concerned with the production and distribution of cereals and forage. It has attempted to support and represent the interests of agriculturists in face of the numerous decrees and ordinances of an economic character which have so strongly affected rural economy and the circulation of products. In this connection we should notice its efforts to ensure that in the several sowing seasons there should be the necessary quantities of seeds, to assist the transport of beetroot, to secure the supply of milk and other agricultural products, and to fix the price of milk. The society further intervenes in the Ministry of Justice when questions inherent in the rise of prices consequent on speculation are at stake. A large sphere for very useful action was provided by the important problem of the rural labour supply. The society was able to act as intermediary between agriculture and the prisoners of war and concentration camps for refugees, thus procuring labour.

The society has also been occupied by the problem of finding homes for soldiers returned from the war (*Kriegerheimstätten*). The task reserved for agriculture after the war has been lengthily studied from the points of view of legislation, technique and finance. The society's propaganda in favour of the essication of potatoes has also been most useful: here it has been possible even to put schemes into practice, plans and devices for the construction of essicating establishments having been actually executed.

In the matter of providing food-substitutes the society has been equally active.

Mention should also be made of lectures on the principles of diet, given or organized in order to demonstrate the necessity of adapting consumption to the exigencies of war and to the new products intended as foods. Efforts made to increase kitchen-gardening were no less important: seeds were actually distributed free of cost; gardening was superintended; and produce was carried to the market. The problem of unemployment was closely studied with the help of the society's labour bureau.

The second part of the report is given up to the various offices or departments of the general secretariat. The office of information has a department occupied by questions inherent in tariffs; a department of administration is devoted to the funds and the book-keeping; and there are a labour office, an office for the sale of milk, an office concerned with feeding live stock, an office for agricultural machinery, and an office for alimentary products which was created in October 1914. We must add to these the offices of the library and museum, the editorial office of the society's agricultural journal, and the office of its archives.

RUSSIA.

RUBNOFF (S. V.): *THE CO-OPRATIVE MOVEMENT IN RUSSIA: ITS HISTORY, SIGNIFICANCE AND CHARACTER*. Published by the "Russian Co-operator", 83, Finsbury Pavement London E. C. 2. 1917; 162 pp.; 37 illustrations.

This book contains a mass of exact and detailed information on the great co-operative movement in Russia; which is playing such an important part in the economic life of that country. The author gives also a general review of the state of agriculture in Russia, which is still primarily an agricultural country, the agricultural classes supplying the main backbone of the co-operative movement.

The scope of the work of the author can be gauged from the contents of the book, which we give below:

Chapter I. — Agricultural Russia:

- 1) General Review.
- 2) Progress of the Peasants' Small Holdings.

Chapter II. — The Co-operative Movement:

- 1) General Remarks.
- 2) Forms of Organization:
 - a) Artels — Labour Artels, Kustar Artels.
 - b) Agricultural Societies.
 - c) Consumers' Societies.
 - d) Credit Societies.

Chapter III. — Co-operative Unions:

- 1) The Building-up of Co-operative Unions:
- 2) Unions of Credit Societies.

3) Unions of Consumers' Societies.

4) Agricultural Unions. *

Chapter IV. — Some Co-operative Associations :

1) The Union of Tar Artels.

2) The Union of the Siberian Creamery Associations.

3) The Moscow Union of Consumers' Societies.

Chapter V. — Co-operative Banks :

1) The Moscow Narodny Bank.

2) The Warsaw Co-operative Bank.

Chapter VI. — Institutions for Promoting and Assisting Co-operation :

1) The Role of the Zemstvos.

2) Co-operative Committees and other Institutions.

3) The Co-operative Congresses.

Chapter VII. — Some other Aspects of Co-operation :

1) Educational Work.

2) People's Palaces.

3) The Legal Position.

Chapter VIII. — The War and the Co-operative Movement :

1) The General Effect of the War.

2) The War and the Village.

3) The Latest Period.

Chapter IX.

1) International Tendencies of Russian Co-operation.

2) The Idea of International Co-operative Exchange.

Part II: Insurance and Thrift

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

CANADA.

1. AGRICULTURAL INSURANCE IN SASKATCHEWAN IN 1916. — *Canadian Finance*, Vol. VIII, No. 12, pp. 466 and 467, Winnipeg, 20 June 1917.

The following tables give data as to the chief types of insurance in Saskatchewan, and allow the business in 1916 of the companies for mutual insurance of live stock and against fire, hail and tornados to be estimated.

I. — *Mutual Fire Insurance Companies - 1916.*

Name of Company	Premiums & Assessments Received	Indemnities Paid
	\$	\$
Arcola Mutual Fire Insurance Company . . .	5,228.47	6,846.23
Germania Mutual Fire Insurance Company .	1,430.90	2,944.30
Miniota Farmers' Mutual Fire Insurance Company	14,185.35	15,506.82
Retail Lumbermen's Mutual Fire Insurance Company	10,533.50	9,741.52
Retail Merchants' Mutual Fire Insurance Com- pany	12,073.74	494.48
Saskatoon Mutual Fire Insurance Company .	50,624.63	22,031.40
Wawanesa Mutual Insurance Company . . .	104,673.24	53,449.600
Total . . .	198,749.83	111,014.35

II. — *Hail Insurance - 1916.*

Name of Company	Premiums \$	Indemnities \$
Acadia Fire Insurance Company	31,824.16	70,411.22
American Central Insurance Company . .	8,908.96	24,972.85
British America Assce. Company	46,864.77	63,077.05
British Crown Assce. Company	225,694.59	215,579.27
Canadian Indemnity Company	73,412.22	110,402.26
Canadian Hail Insurance Company	72,542.95	95,127.67
Canada National Insurance Company Limited	73,096.46	124,876.02
Canada Security Assurance Company . .	88,802.95	87,441.97
Canada Weather Insurance Company . .	23,552.35	14,990.13
Connecticut Fire Insurance Company . .	14,072.66	4,277.24
Dominion Fire Insurance Company . . .	34,775.69	25,023.75
Excess Insurance Company	102,437.76	131,190.84
Great North Insurance Company	76,234.48	58,929.83
Glens Fall Insurance Company	78,036.44	75,646.67
Home Insurance Company	102,607.55	176,806.91
Hartford Fire Insurance Company	96,360.96	80,140.14
Middle West Insurance Company	39,662.35	49,990.94
Nova Scotia Fire Underwriters	9,657.87	11,623.67
New York Underwriters Agency	25,624.42	30,785.44
Northwestern National Insurance Company	99,493.23	113,717.35
Rochester Underwriters' Agency	18,110.29	29,964.44
St. Paul Fire and Marine Insurance Company	54,802.10	86,548.43
Winnipeg Fire Underwriters' Agency . .	3,150.96	3,887.50
Westchester Fire Insurance Company . .	32,015.96	7,997.97
Total . . . 1916	1,431,742.13	1,693,291.25
Corresponding total for 1915	1,363,001.66	438,619.57

III. — *Live Stock Insurance - 1916.*

Name of Company	Premiums \$	Indemnities \$
General Animals Insurance Company	8,013.03	3,365.00
Great North Insurance Company	5,192.55	350.00
Yorkshire Insurance Company	2,567.20	824.00
Total . . . 1916	15,772.78	4,539.00
Corresponding total for 1915	10,125.05	7,427.80

IV. — *Tornado Insurance.*

Name of Company	Premiums \$	Indemnities \$
American Central Insurance Company	494.51	690.06
Aetna Insurance Company	1,370.67	—
Canada Weather Insurance Company	624.04	3,018.00
Canada National Insurance Company Limited .	11.00	—
Fidelity Phenix Fire Insurance Company . . .	487.36	—
Firemen's Insurance Company	37.50	—
German American Insurance Company	321.22	—
Glens Falls Insurance Company	768.09	—
Hartford Fire Insurance Company	1,379.14	483.28
Home Insurance Company	815.78	85.00
Insurance Company of the State of Pennsylvania	429.88	177.20
Mercantile Fire and Marine Underwriters, Agency of the American Central Insurance Company .	147.99	2.87
Minnesota Underwriters' Agency of the St. Paul Fire and Marine Insurance Company	99.50	48.10
National Fire Insurance Company of Hartford .	747.25	82.17
National Union Fire Insurance Company . . .	331.25	59.00
Northwestern National Insurance Company . .	639.90	32.50
New York Underwriters' Agency	2,645.58	1,160.27
Scottish Union and National Insurance Company	369.40	—
Springfield Fire and Marine Insurance Company	2,936.16	783.28
St. Paul Fire and Marine Insurance Company .	5,131.23	5,215.27
Underwriters' Agency of the Firemen's Insurance Company of Newark	10.00	—
Total . . . 1916	19,797.45	11,837.00
Corresponding total in 1915	14,357.55	456.38

a. PREVENTION OF FOREST FIRES.

Canada lost \$ 9,000,000 by forest fires in 1916, more than six times as much as had been spent on forest protection work. Most of these fires were preventable.

In *British Columbia* the effect of an efficient forest-protection service and somewhat more favourable weather conditions was to reduce the number of fires to about half their number in the previous year. Yet a substantial loss was suffered and a better protection service would have been profitable.

The presence of a protective force, trails, and look-out towers connected with headquarters by telephone, enables fires to be effectively tackled when

they do break out. A more important and a really preventive measure is to curtail the quantity of dry material on the forest floor, thus reducing the danger of fire, and so diminishing the heat of such fires as do occur that they cause less injury to the trees and soil.

The lumbering "slash" makes such a hot fire as to render the outlook for the next tree crop very poor. The tree seedlings and the uncut trees are generally destroyed or very much damaged. A most important part of forestry is to dispose of this "slash" as soon as possible after the lumbering work is done. In this the lumber companies have been urged to co-operate with the forest service.

Many destructive fires have been caused by the careless methods of settlers who burn the "slash" they produce while clearing land. The advice now given to them by fire rangers and the permit system have reduced this danger.

The protective work done by the railway companies, under regulations issued by the Board of Railway Commissions, as to clearing rights of way, constructing fire guards, patrolling the line during the dry season, etc., has been effective. This legislation requires the railway companies to extinguish fires within 300 feet of the railway unless they can show that they did not cause the fire. The principle is that the railway companies must protect the public against damage by railway fires.

The *Ontario* legislature has passed a law to preserve the forests of the province against destruction by fire. It provides for the creation of fire districts, and for a close season within which fires shall not be made in the districts except under permit and under the close supervision of an official. It also provides for the appointment of a provincial forester.

Under the bill the northern country is to be divided into three fire areas or districts and a supervisor appointed to have charge of each of these. A fire chief and fire rangers are to be under him.

A new departure has been made by the Land, Forest and Mines Department in entirely undertaking forest protection. It will be responsible for the execution of the Act, and make a charge on the licensees and holders of permits as a contribution towards the protection of their interests.

The new Act is expected to prevent such disastrous fires as those of 1910, 1911 and 1916, in which many lives were sacrificed and many square miles of timber razed.

In *Saskatchewan* the sixth session of the third legislature modified an earlier law on fires within the prairie zone, adding to it provision for forests in accordance with the recommendations of the Canadian Forestry Association.

As regards burning the waste remaining after forest land has been cleared whether for the purpose of a railway, a private road, a telegraph or a telephone line, or of cultivation, the law dictates certain precautions. If waste cannot be destroyed at once its destruction must take place between the following 15 November and 1 April. Between 1 April and 15 November there can be no such burning, without a written permit from the forest guard, within a radius of six miles of a Dominion forest reserve, nor

— with some exceptions — can it take place in the region north of township 50. Such permit can be refused if there is danger that the fire will spread or if necessary precautions have not been taken.

The act provides that in rural districts and unorganized districts there shall be agents responsible for preventing and dealing with fires. The execution of the Act is entrusted to a provincial fire Commission.

UNITED STATES.

1. INSURANCE AGAINST FROST IN IOWA. — *The Country Gentleman*, Vol. I, XXXIII, No. 10, Philadelphia, 10 March 1917.

After collecting the greatest possible number of data as to meteorological conditions in different States the Weather Bureau of the United States has advocated insurance against the risks of bad weather, especially of unseasonable frosts.

It has been recognized that societies undertaking such insurance should, in order to have a secure foundation for their business, establish it on a ten years' basis. In other words policies should be for ten years, the risk of loss being approximately nine to one. The following table shows the results obtained in ten years by a company insuring against spring frosts in two States :

		Premium Payment	Losses	Reserve and Operating Account
	Capital			\$ 100,000
1906	{ Ohio	\$ 5,900	\$ 2,000	
	{ Kansas	5,400	11,000	1,700
	Balance			98,300
1907	{ Ohio	5,900	22,000	
	{ Kansas	5,400	39,000	49,700
	Balance			48,600
1908	{ Ohio	5,900	none	
	{ Kansas	5,400	1,000	10,300
	Balance			58,900
1909	{ Ohio	5,900	none	
	{ Kansas	5,400	none	11,300
	Balance			70,200

		Premium Payment	Losses	Reserve and Operations Account
		—	—	—
1910	{ Ohio	5,900	1,000	
	{ Kansas	5,400	none	10,300
	Balance			80,500
1911	{ Ohio	5,900	none	
	{ Kansas	5,400	none	11,300
	Balance			91,800
1912	{ Ohio	5,900	7,000	
	{ Kansas	5,400	1,000	3,300
	Balance			95,100
1913	{ Ohio	5,900	none	
	{ Kansas	5,400	8,000	3,300
	Balance			98,400
1914	{ Ohio	5,900	none	
	{ Kansas	5,400	3,000	8,300
	Balance			106,700
1915	{ Ohio	5,900	2,000	
	{ Kansans	4,400	3,000	6,300
	Balance			113,000

This company insured fifty-nine places in Ohio and fifty-four in Kansas against killing frost, after a date named in each policy which was determined for each place on the basis of the records of the Weather Bureau. The date selected was four days later than that which was the latest date of a killing frost, in 90 per cent. of all the years for which a record has been kept, in the place in question. The margin of four days is necessary to cover the cost of doing business and to provide a small reserve for prompt payments.

The following tables show, by way of example, the rates demanded in a single county by companies insuring, respectively, against spring and autumn frosts :

1. *Weatherwise Insurance Company of Kansas City, Kansas.*

Rates per \$ 1000 on Spring Frost.

If killing frost occurs on or after		Annual premium per \$1,000
April	20	\$ 490
"	25	334
"	30	200
May	5	100
"	10	44
"	15	17
"	20	5
"	25	1

For hillsides (not hilltops) 200-400 feet above the valley substract from the given rate 3 per cent. for north slopes, 5 per cent. for south slopes. For valley bottoms less than 5 miles wide add to the given rate 10 per cent.

2. *The Frostproof Insurance Company of Sioux City, Iowa.*

Amounts Payable for \$1000 Annual Premium - Autumn Frost.

When killing frost occurs before		The payment is]
September	15	\$ 575
"	20	225
"	25	100
"	30	50
October	5	30
"	10	20

For valley bottoms subtract 12 per cent. from the amount payable. For slopes at least 200 feet above the valley bottom and at least 100 feet below the hilltop add 5 per cent. to the amount payable.

2. **MUTUAL, AGRICULTURAL, INSURANCE AGAINST WINDSTORMS IN ILLINOIS.** — Forty-seventh Annual Insurance Report of the Insurance Superintendent of the State of Illinois 31 December 1914.

The mutual companies for insurance against windstorms are divided in Illinois into classes — the district companies, active only within a number of counties not more than five; and the county companies which are active only in single counties. There were on 31 December 1914 four of the former and eight of the latter.

The following are some data as to their business in 1914:

	County Companies	District Companies
Risks written during year	\$ 402,082.00 *	\$ 8,387,097.00
Total income	3,992.12	47,897.77
Losses paid	1,837.49	13,804.04
All other expenditure	1,736.37	24,570.81
Total expenditure	3,573.86	38,374.85
Cash Assets	754.39	27,523.87
Liabilities	951.19	215.00
Risks in force at end of year	2,054,716.00 *	34,253,256.00
Number of risks written	305 *	4,231
Number of risks in force.	1,570 *	18,293

(*) On 1 October 1914.

Part III: Credit

RUSSIA.

THE ACTIVITY OF THE PEASANTS' LAND BANK.

OFFICIAL SOURCES:

- Отчеты крестьянского земельного банка (*Reports of the Peasants' Land Bank*). Petrograd, 1907-1915.
- Дѣятельность крестьянскаго земельного банка (*Activity of the Peasants' Land Bank*) Resumed reports published annually in the weekly official review of the Ministry of Finances "Вѣстникъ финансовъ, промышленности и Торговли". Petrograd, 1907-1916.
- О покупке крестьянскимъ земельнымъ банкомъ ликвидируемыхъ земель непріятельскихъ поданныхъ и выходцевъ (*Purchase by the Peasants' Land Bank of lands belonging to subjects of enemy countries and banished persons*), in the review "Вѣстникъ финансовъ, промышленности и Торговли". (*Messenger of Finances, Industry and Commerce*), No. 27. Petrograd, 1916.

OTHER SOURCES:

- Движеніе земельного запаса крестьянскаго банка (*The Transference of Lands belonging to the Bank of the Agriculturists*) in the review Земледѣльческая Газета (*The Journal of Agriculture*), No. 31, 1916.
- LA BANQUE IMPÉRIALE FONCIÈRE DES PAYSANS (*The Peasants' Imperial Land Bank*). Chambre de Commerce russe de Paris, 1913.

The year 1915 virtually ended the third and most important period of the activity of the Peasants' Land Bank. In view of the diminution of its activity, which as a consequence of the war was much and increasingly emphasized, its operations in 1916 could not in any way influence the results of this third period; and in 1917 landed property was, as is known, forbidden by the government to change lands by way either of sales or of gifts. The bank's operations in the matter of selling land to peasants were therefore interrupted if not suppressed. Moreover, in accordance with the declarations of the government, this bank and the Bank of the Nobility were transformed into a single land bank, open no longer to citizens of cer-

tain categories but to all of them indiscriminately; and thus the third period may be considered as having ended in 1915 and we can examine it as being already in the past. Therefore the report for 1915 as compared with those for 1907-1914 has a very great interest for the student of the most important agrarian reform of the twentieth century.

The activity of the Peasants' Land Bank in the period we have mentioned was determined by a series of laws and circulars which radically changed its policy. From 1882 to 1895 the bank confined itself to accepting mortgages on the lands which the peasants bought by private contract from the landed proprietors. From 1896 to 1906 it took on the added function of purchasing lands directly to sell them to the peasants. The third period begins with the decree of 9 November 1905 by which the bank received the right to issue unlimited bonds for the purchase — which took place frequently — of lands belonging to individuals. The laws of 12 and 27 August concentrated in the bank the great mass of the *oudiel* or crown lands and the State lands. This enormous area — for the extent of the lands intended for sale to the peasants had thus been increased — was destined in particular for the creation of peasants' individual properties. The ensuing laws contributed to the realization of this aim, for they granted special advantages to peasants who acquired land in individual proprietorship — as for example under the law of 1907; encouraged collective property to disappear by giving the bank the right to accept mortgages of *nadiel* lands which had been inalienable (law of 15 November 1906); and allowed the usufructories of the *mir* to demand the conversion of their shares into private property (law of 9 November 1906).

§ I. PURCHASE OF LANDS.

The number of properties sold to the bank in 1915 was eighty-six and they had a total area of 105,950 deciatines (1). The bank approved the purchase of forty-six properties, extending over 50,179 deciatines; and twenty of these, having an aggregate area of 17,835 deciatines, were actually bought, the bank paying for them 2,074,062 roubles (2) or an average of 116 roubles a deciatine.

The following table gives an exact idea of the general development of the purchase of lands during the third period.

(1) 1 deciatine = 2.698 acres. (2) 1 rouble = about 25 1 ½ d. at par.

TABLE I. — *Number and Total Area of Properties Bought from 1906 to 1915.*

Year	Total Number of properties bought by the Bank	Total Area of lands bought — deciatines
1906	700	1,144,464
1907	1,191	1,519,547
1908	465	572,082
1909	189	172,842
1910	185	172,189
1911	135	196,227
1912	125	146,544
1913	174	301,194
1914	76	83,503
1915	10	17,835
Total . . .	3,260	4,346,427

If the last figure as to purchases be compared with those of the years 1913 and 1914 a strong and progressive retrogression in this business will be noted, which confirms our statement that the third and last period of activity of the agriculturists' bank virtually ended in 1915.

It should be noted that 74.9 per cent. of the total area was bought by the bank between 1906 and 1908. The grave economic and social crisis which characterizes this period was a strong stimulus to purchase. The majority of proprietors were convinced that expropriation was near at hand, and therefore they were anxious to sell. The peasants for the same reason refused to buy. Moreover some of the proprietors were unable to derive any profit from their farms which the revolted peasants had devastated, and therefore wished to be rid of them. In receiving the right to issue unlimited bonds the bank may be said to have met the desires of proprietors by buying their lands and thus accumulating the power to dispose of a large area. This was followed by the re-establishment of order and fine harvests. The diminution of business resulted from the previous purchase of properties economically weak. The year 1913, in which the agitation in the country recommenced, was marked by a renewed increase of purchases which was stopped only by the war.

The following table gives an exact idea of the motives for the bank's purchase of lands.

TABLE II. — *Total Value of Properties Bought by the Bank*

Year	Total value of properties bought — roubles	Motives of sale —
1906	127,364,147	political
1907	186,218,534	political
1908	107,786,703	political
1909	30,093,023	partly political
1910	18,722,362	economic
1911	11,857,676	economic
1912	11,940,686	economic
1913	31,362,119	partly political
1914	11,385,285	economic
1915	2,074,062	economic
Total	538,804,597	

Of the properties bought by the bank in 1915 only three belonged to individuals (two to the nobility) ; seven belonged to *bashkiri* and the others to subjects of countries at war with Russia and those banished from these countries.

The total results of this third period give the following table :

TABLE III. — *Percentage of the Properties Sold to the Bank belonging to each of the Several Categories.*

Year	Nobility		Commerce		Middle class		Peasants		Various		Total
	% of number sold	% of area sold	% of number sold	% of area sold	% of number sold	% of area sold	% of number sold	% of area sold	% of number sold	% of area sold	
1906	75.4	77.4	10.1	14.2	1.8	0.4	3.8	1.7	8.8	6.2	100
1907	82.2	79.9	8.3	12.8	2.4	1.0	4.1	3.5	3.0	2.8	100
1909	84.2	90.5	6.3	5.0	4.2	2.7	2.7	0.8	2.6	1.0	100
1910	69.2	58.2	4.8	20.3	10.3	5.7	10.3	13.6	5.4	2.2	100
1911	44.4	23.0	7.4	5.5	3.7	1.1	40.8*	65.4*	3.7	5.0	100
1912	45.6	55.6	3.2	3.6	7.2	4.8	39.2*	28.8*	4.8	7.2	100
1913	39.6	43.8	12.5	12.4	8.6	3.0	34.5*	19.6*	4.8	2.2	100
1914	50.7	41.9	11.0	18.1	5.5	2.4	27.3*	36.5*	5.5	1.1	100
1915	10.0	4.0	0.0	0.0	0.0	0.0	60.0	57.2	40.0	38.0	100

(*) Lands of the *bashkiri* or natives of the eastern steppes, occupied by primitive stock-farming.

This table shows that in the first years the nobles formed the large majority of proprietors selling their lands. Their category and that of the traders and the various sellers, most of whom belonged to one of the two former classes, included almost all the sellers. Afterwards the percentage of nobles tended to be lowered and to yield place to that of peasants. The percentage of nobles would always have remained very high if the purchase had not been initiated of lands of the *bashkiri*, on whose steppes many lands intended for Russian settlers were sold, after regular shares had been assigned to the *bashkiri*. If the lands of the *bashkiri* be excluded the percentage of peasants selling their lands is very low and that of the hereditary nobility doing so is very high.

If we compare the enormous extent of 4,346,427 deciatines, worth 538,804,597 roubles, bought by the bank in this third period (1906-1915), with the bank's purchases from 1882 to 1906 which were of 961,487 deciatines worth 68,183,124 roubles, we must allow that in this branch of its activity it realized in this period a great development.

§ 2. CESSION OF " OUDIEL " LANDS.

To the land bought by the bank from individuals was added that ceded to it by the administration of the *oudiel* (crown lands) by the decree of 12 August 1906. A total area of 1, 258,089 deciatines, costing 70,788,438 roubles, was thus ceded. In 1915, 428 deciatines were ceded for 19,888 roubles.

5,604,436 deciatines, costing 609,593,035 roubles, thus passed to the bank in the third period.

§ 3. PROPERTIES REMAINING TO THE BANK AFTER AUCTIONS.

In 1915, in view of the difficulties of wartime, the bank had recourse, in cases of extreme necessity only, to public auctions of the properties for which due sums had not been paid. Delays were granted in the case of all properties situated in the invaded districts and the neighbourhood of the zone of military operations, that is in eighteen provinces. In other districts the bank, before decreeing an auction, investigated the causes of delays and held no auctions where these were serious, as in the case of defective harvests or lack of labour.

Nevertheless 62,984 properties were put up for auction. Of them 55,080 having an area of 668,512 deciatines, were in private ownership; 5,925, having an area of 1,175,444 deciatines, belonged to co-operative associations; and 1,149, having an area of 573,803 deciatines, belonged to rural communes. These lands represented 15.2 per cent. of the total mortgaged area; and 16.9 per cent. of those in private ownership, 12.4 per cent. of those owned by

rural communes, and 8.1 per cent. of those owned by peasants' societies. 60,892 properties put up for auction, or 96.7 per cent. of them, were withdrawn, either because the debtors paid their arrears (in 37,449 cases), or because the bank made some concession or simply granted a prorogation (20,839 cases) or for other and various reasons (2,604 cases). Of the remaining 2,092 properties 91 were sold by auction and the other 1,990 remained to the bank. The following table gives a complete idea of the sales by auction in this third period.

TABLE IV. — *Number of Properties sold by Public Auction in the Third Period.*

Year	Number of properties sold by auction	% of total lands mortgaged	Total area of lands sold — dectiaines	% of total area of lands mortgaged
1915	91	0.022	1,415	0.008
1914	75	0.018	1,399	0.007
1913	127	0.038	3,125	0.020
1912	69	0.024	1,538	0.010
1911	31	0.015	1,144	0.009
1910	26	0.019	740	0.007
1909	25	0.029	4,412	0.014
1908	11	0.016	2,966	0.033
1907	12	0.019	2,633	0.032

The following table is significant. It shows the number of properties put up for public auction and the number of such which were left to the bank from 1907 to 1915.

TABLE V. — *Sales by Public Auction from 1907 to 1915.*

Year	Number of properties put up for auction	% of mortgaged properties	Number of properties not sold	% of mortgaged properties
1915	2,092	0.51	1,990	0.49
1914	847	0.23	745	0.20
1913	1,295	0.37	1,085	0.33
1912	690	0.24	603	0.21
1911	256	0.12	218	0.10
1910	223	0.16	196	0.14
1909	206	0.30	241	0.28
1908	333	0.50	321	0.48
1907	463	0.74	450	0.12

The great increase in the number of properties left to the bank after auctions is the result of a very interesting circumstance. According to the report of 1915, it is explained by the fact that "in the first months of the activity which tended to a vast development of individual property, the rural population regarded this tendency rather coolly. It was therefore impossible to secure the desired choice of purchasers and some of the lands passed to peasants whose economic situation was too weak. The bank, when it perceived that it was absolutely impossible for these peasants to carry on well the farming they had undertaken, was constrained, after having granted many facilities to the purchasers, to put these lands up for auction".

In other words the first aim of the reform of 1907 was the creation at all costs of individual property in order to split up the compact mass of the *mir*; and, as a more detailed analysis will show, the formation of a certain class of peasant proprietors was only a secondary aim.

This third period and the activity which preceded it left to the bank hundreds of thousands of deciatines, emanating from purchasers not fulfilling their obligations in time, in spite of the various facilities granted to them; and this is on the whole an unfavourable indication of the bank's land policy.

Thus the following table shows that while from 1887 to 1905 only 273,006 deciatines, worth altogether 17,762,653 roubles, were left to the bank; within a far shorter period the area not sold, when put up for public auction, was 566,562 deciatines, having a total value of 65,635,445 roubles.

TABLE VI. — *Total Area and Mortgage Debt of Lands left with the Bank.*

Year	Number of properties	Total Area — deciatines	Mortgages burdening the properties — roubles
1887-1905	272	273,006	17,762,653
1906	217	51,550	4,008,460
1907	381	158,946	11,730,829
1908	241	132,672	10,400,000
1909	170	53,069	5,131,834
1910	223	23,459	1,934,473
1911	218	18,810	1,483,173
1912	591	28,580	2,679,574
1913	965	34,560	3,029,388
1914	729	16,950	1,694,158
1915	1748	47,966	5,781,003

The influence of the bank's vast purchase of lands caused the price of lands to rise to an unprecedented level, and therefore the peasants were

obliged to pay sums which were sometimes a real obstacle to the improvement of agriculture.

The general course of the purchasing prices established by the bank was as follows :

TABLE VII. — *Average Price Paid by the Bank for each Deciatine of land bought from Individuals.*

Year	Average price	Average price excluding lands of the baskhirs
1906	108	108
1907	105	105
1908	96	96
1909	113	136
1910	113	130
1911	92	114
1912	85	102
1913	86	—
1914	127	140
1915	171	176

During the years which preceded the third period the bank bought lands at a lower price. In 1904 the average price of a deciatine was 69 roubles, in 1915 it was 94 roubles. The average price from 1893 to 1905 was only 71 roubles while from 1906 to 1915 it reached 122.4 roubles.

It should be added that while the price increased owing to the largeness of purchases, the bank could sell the lands of which it disposed at a lower price than that which the peasants paid to the proprietors when they bought directly and without the bank's aid.

§ 4. SALES OF THE BANK'S REAL ESTATE.

As a result of its large purchases of lands the bank concentrated in its own ownership 5,919,222 deciatines, of which the larger part was bought in the first three years of the third period. Immediately afterwards sales increased and purchases diminished. The lands bought at a high price, often when the peasants had depreciated them, represented a pure loss for the bank's administration, and profits derived from those of them which the bank held temporarily were always very much less than the percentages which had to be paid to possessors of the bonds the bank had issued. In the beginning of the period examined, on 12 June 1907, the circular of the committee for the regulation of the agrarian question asserted that "every delay in the sale of the real estate is undesirable, from the point of view both of finances and of the regularization of the agrarian question".

This brings us to the examination of the bank's activity as applied to the liquidation of its lands.

Operations of this kind in 1915 were of the smallest importance. The war and the change in economic life consequent on the war could not influence their course. In 1914 a diminution of sales had been noticed. In 1915 it was even more marked, sales of this kind ceasing altogether in districts which were or are within the theatre of military operations.

In the first place the undertakings preliminary to this liquidation diminished. 106,823 deciatines were divided into lots in 1915 as against 206,629 in 1914 and 210,475 in 1913.

The great work of preparing the land for sale, the redistribution of the lots of one tenant or unification of the parcels forming *houters*, the provision of a sufficient water-supply and the arrangement or construction of roads, are all included in the following table ;

TABLE VIII. — *Operations Preparatory to the Sale of Lands.*

Year	Area to which approved plans for liquidation are applied deciatines	Area engrossed by works of preparation deciatines
1907	795,168	740,831
1908	1,539,820	1,184,375
1909	1,083,730	1,281,071
1910	563,422	564,880
1911	361,495	352,543
1912	264,182	260,265
1913	274,458	210,475
1914	221,930	206,649
1915	116,092	106,823
Total	5,220,297	4,748,339

As appears from this table 73.7 per cent. of the total area belonging to the bank and 95 per cent. of the area for which plans for rearrangement were approved up to 1 January 1916, have been completely arranged for sale.

This area should be reduced by 255,702 deciatines, for which the relevant plans have been changed. Therefore during nine years plans have been approved for the arrangement of 4,964,595 deciatines or 77 per cent. of the whole area belonging to the bank.

Side by side with these works others were undertaken, works of improvement and irrigation.

In 1915, 357 wells were sunk and 59 previously in existence were re-made; 90 basins were constructed; and 4,500 deciations of land, in which 75 kilometres of canal were dug, were improved. Other works, such as the strengthening of banks and making of bridges, were also executed. The total cost of these works was 1,401,307 roubles as against 2,250,490 roubles in 1914, giving a reduction of 37.7 per cent.

The following table shows that 7,747 wells and 2,868 basins were dug and 213,500 deciatines of land were improved between 1909 and 1915.

TABLE IX. — *Works of Arrangement and Improvement executed in the Period 1909-1915.*

Year	Wells	Basins and dikes	Lands improved deciatines
1909.	1,625	450	25,000
1910.	2,034	529	55,000
1911.	1,788	763	59,000
1912.	1,082	902	54,000
1914.	861	134	16,000
1915.	357	90	4,500
Total . . .	7,747	2,868	213,500

The area intended for liquidation in 1915 was 887,625 deciatines of which 528,729 deciatines had been arranged in previous years; 31,457 deciatines were intended to be sold without being arranged; and 106,823 deciatines were arranged in 1915. In the case of 48 per cent. or about 403,910 deciatines the procedure for liquidation was begun to be applied, but at the end of the year it had been concluded for only 137,216 deciatines as against 315,785 in 1914 and 441,370 in 1913.

As the bank's activity was applied principally to the formation of individual properties, a large part of these lands actually passed to private ownership.

In the period in question 903,581 deciatines of *houlor* and 2,128,960 deciatines of *otroub* land were sold, of which only 351,582 deciatines passed to collective ownership. The lands sold from 1908 to 1915 were distributed as follows among the various categories of purchasers:

TABLE X. — *Lands sold by the Bank from 1908 to 1915 (deciatines).*

	1908	1909	1910	1911	1912	1913	1914	1915	Total
Private persons . . .	432,075	848,078	819,508	548,062	341,367	286,886	197,901	52,788	3,576,665
Rural Societies . . .	94,217	70,814	46,851	28,281	80,446	15,771	10,423	4,779	351,582
Private persons . . .	82.1%	92.3%	94.9%	95.1%	93.8%	94.8%	95.0%	91.7%	100.0%
Rural Societies . . .	17.1%	7.7%	5.1%	4.9%	6.2%	5.2%	5.0%	8.3%	100.0%

The lands sold by the bank as individual properties were distributed among the categories of property in the following proportions:

TABLE XI. — *Absolute and Relative Distribution among the Categories of Property of the lands sold from 1907 to 1915.*

Categories	Definite Sales		Sales not yet definite		Sales with mortgage guarantee		Leases to be transformed into sales		Total	
	Area — deciatines	%	Area — deciatines	%	Area — deciatines	%	Area — deciatines	%	Area — deciatines	%
Choutor	903,381	23.2	4,307	54.1	27,738	21.6	45,316	57.1	980,942	23.8
Otrub	2,128,960	54.7	2,376	29.8	86,549	67.4	40,190	45.3	2,258,075	54.9
Societies and rural communes . . .	670,038	17.2	726	9.1	8,176	6.4	3,173	3.6	682,133	16.6
Institutions . . .	175,956	4.5	560	7.0	5,365	4.2	—	—	181,881	4.4
Enterprises of public utility	12,660	0.4	—	—	477	0.4	—	—	13,137	0.3
Total . . .	3,891,215	100.—	7,969	100.—	128,305	100.—	88,679	100.—	4,116,168	100.—

The lands sold in 1915 were distributed as follows: there were 6,434 sales, of which 6,419 to individuals and 75 to rural societies affected, respectively, areas of 116,076 and 9,682 deciatines, as against 272,855 and 17,760 deciatines in 1914.

In nine years of liquidation the total number of loans granted and the area of the lands sold were as follows:

TABLE XII. — *General Results of the Liquidation of the Lands of the Bank, from 1907 to 1915.*

Year	Total Number of Loans granted by the Bank	Total Area of Lands sold — deciatines	Number of Individual Purchases	Area of Lands sold as Individual Property — deciatines	Percent of Total Number of Loans granted to Individual Proprietors	Percent of Total Area sold to Individual Proprietors
1907	1,069	180,148	447	4,599	41.8	2.5
1908	13,559	324,956	12,451	126,073	91.8	38.8
1909	39,438	551,307	38,528	432,487	97.7	78.5
1910	50,227	764,771	49,533	711,207	98.6	93.0
1911	40,549	679,658	40,177	633,754	99.1	93.3
1912	23,366	371,687	23,092	347,413	98.8	93.5
1913	22,082	410,118	21,808	387,905	98.7	94.6
1914	15,169	290,615	14,993	272,855	98.8	93.9
1915	6,494	125,758	6,419	116,076	98.3	92.3
Total	211,963	3,699,018	207,548	3,029,369	98.0	82.0

This table shows a progressive diminution in sales by the bank, the lands it held diminishing in extent since it made no new purchases. This was not the only cause of the diminished sales: the change in the government's agrarian policy should be added to it. For various and multiple reasons the great reform did not succeed in radically changing rural life. The mass of the rural population was necessarily outside the bank's sphere of action, and continued to have all that desire to possess land which characterized all Russian history in last century. A part of the population remained landless precisely as a consequence of the bank's activity. The government began to contemplate the reform which aimed at satisfying the land hunger, at least partially, and therefore distributed lands amongst the neediest peasants in a very different measure from that which the formation of a class of well-to-do peasants would have entailed. The fact that land was sold almost exclusively as private property had quite another effect. The radical transformation of rural economy, the passage of the collective property of the *mir* to individual property, necessarily entailed enormous costs; for really profitable results could be drawn from the *houlor* and the *otroub* only by a radical transformation of agriculture and the whole aspect of the countryside. This result could be attained only on a small part of the *houlors* which the bank formed for the peasants. In the mass of the rural population a reaction set in, a movement against the bank's activity. Hostility to the *houlors* and the *otroubs* arose. There was a reversion to the situation of the period in which, according to the bank's reports, "the activity, tending to a vast development of individual property" was regarded "rather coolly".

The following details as to the distribution of the lands sold to the peasants do not lack interest. The table shows that a great part of the lands were sold in somewhat large lots, of an area far above the average.

TABLE XIII. — *Percentage of Lands sold as Individual Properties according to area.*

Year	up to 10 declatines	from 10 to 20 declatines	from 20 to 50 declatines	from 50 to 100 declatines	Total
1910	32.9	51.7	15.1	0.3	100
1911	28.1	49.9	21.4	0.6	100
1912	33.3	46.8	19.2	0.7	100
1913	19.7	48.4	27.7	4.2	100
1914	88.2	9.1	6.8	1.4	100
1915	22.7	46.2	29.9	1.2	100

It is most interesting to notice that the percentage of lands sold as *houlor* increases progressively as compared with those sold as *otroub* lands.

TABLE XIV. -- *Percentage of Sold Lands which were sold as Otroub and Houtor Lands, respectively.*

Year	Lands Sold	
	<i>houtor</i>	<i>otroub</i>
1910	23.6	57.6
1911	25.8	68.2
1912	31.2	66.0
1913	34.0	68.8
1914	37.0	74.2
1915	42.4	76.4

This table is one of the best illustrations of the bank's agrarian policy. In itself a *houtor* represents, as compared with an *otroub*, no agronomic progress. It unites in a single tenure various lots, only the peasant's house remaining in the village. The *houtor* is on the other hand a single farm including even the site of the peasants' house within its lands; but, as appears from the circulars and the practice of commissions charged to resettle the land, the *houtor* is often divided into various lots, sometimes widely separated from one another, and this makes it inferior to the *otroub*. It is however exactly this tendency to isolate the peasant at all costs, severing his ties with the village, which characterizes the bank's policy. Thus the circular of 19 February 1908 says that the *houtor* should have the first place in the land system, and places the *otroub* below the *houtor* divided into several lots.

From the point of view of the progress of agriculture the *houtor*, divided into several lots, is certainly less good than the *otroub*; but the *houtor*, equally certainly, serves better than the *otroub* to split up the masses of the peasant population.

In other words the policy of dividing and scattering the peasants was followed energetically and insistently, and it is in the predominance given to a purely and simply political principle that the causes of the discontent among the masses of the population must be sought. At bottom it was not brought about by the *houtors*, but by the lack or insufficiency of the enterprise which would have rendered *houtors* really profitable to the peasants.

In order to have an exact idea of the movement of the bank's lands we must notice that of 2,286,318 deciatines which it held on 1 January 1916, 802,261 deciatines cannot now be sold and 332,059 deciatines are not intended to be sold to the peasants.

The 802,201 deciatines belong to various categories: 299,058 are let on a lease of several years, and the remainder can either be sold with them or only after a series of works of irrigation and improvement have been executed. As regards the 332,059 deciatines not intended for sale to the peasants, they consist of 274,710 deciatines of woods to be preserved in the national interest; 19,769 deciatines destined for institutions; 3,844 for

churches, cemeteries, etc ; 29,829 for the needs of pisciculture ; and 3,908 deciatines which are not adapted to agriculture.

Thus there still remain unsold 1,151,898 deciatines or 17.9 per cent of the area belonging to the bank during the last nine years.

These lands are classified as follows : 42.4 per cent. are to be sold as *houiors*, 44.7 per cent. as *otroubs*, 8 per cent. as the collective property of the holders of the *houiors* and *otroubs*, and 4.8 per cent. to the agricultural societies and communes.

It should be noted that the lands sold to an agrarian society or community are largely lands which, because of their too small area or for other reason, are not adapted to the formation of individual farms. These sales were also made in order to allow the peasants to redistribute their *nudiel* lands and thus prepare for the supersession of the *mir* by private property.

The third period is seen to be completely detached from those which preceded it, in which the bank met the "desire of the peasants to preserve collective property at all costs" and sold land principally to agrarian communities and societies, so that at the beginning of the new period, on 1 January 1908, of the whole area of mortgaged lands, comprising 7,062,020 deciatines, 72.6 per cent. belonged to agricultural societies and 25.3 per cent. to rural communes, while only 2 per cent. formed individual properties. In the third period however 98.8 per cent. of the lands sold by the bank passed to individuals.

The examination of this part of the bank's activity allows certain further conclusions. The Peasants' Bank was the government's instrument for the regulation and regularization of the passage of the lands of the nobility to the ownership of the peasants. It was thus that the crisis was rendered less acute. Above all the bank took charge of the interest of large property, not only giving this direct aid, but also rendering indirect service in seeking to reduce the compact strength of the *mir*, and in creating, while destroying the *mir*, a class of peasants who because they were well-to-do would be less susceptible to the revolutionary spirit.

(To be continued).

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

ARGENTINE LAND CREDIT IN 1915-1916. — *La Revue Économique et Financière*. Paris, 7 July 1916.

In spite of its abundant products, many of which find large markets and are paid for in gold in Europe, the Argentine Republic is going through a difficult period. The lack of ships and the unreasonable increase of freights are indeed very serious obstacles to exportation, and much of the wealth of the republic has had to be left unmoved and unsold for want of means of transport. It does not seem as though the current year would improve the situation: the harvest of 1916-1917 was below the average owing to drought and invasions of grasshoppers; and the Argentine government was obliged in 1917 to forbid cereals to be exported in order to keep the harvest for the needs of the country.

It is not therefore surprising that the Argentine Land Credit attained in 1916 to less satisfactory results than it would have done in normal circumstances. The crisis is however only transient, is common to all mortgage establishments in the country, and will end as the effects of the war gradually disappear.

The two last profit and loss accounts are compared in the following table:

	1915 frs.	1916 frs.
ASSETS.		
Interest on loans	17,236,613	15,941,564
Delayed interest, indemnities, reimbursements.	154,777	185,593
Interest and various income	62,838	573,946
Profits of property	—	30,783
	<hr/> 17,454,228 <hr/>	<hr/> 16,731,886 <hr/>

	1915 frs.	1916 frs.
LIABILITIES.		
Annuities of bonds	8,531,738	8,490,468
Fiscal dues	219,801	217,582
Interest and commissions	4,069	4,076
Commissions and expenses	6,386	33,820
General expenses	515,303	611,969
	<hr/>	<hr/>
Assets	9,277,197	9,357,915
	17,454,228	16,731,886
	<hr/>	<hr/>
Net profit	8,177,031	7,373,071
Deduct :		
Remunerations as by by-laws	—	200,000
Special provision	4,188,130	2,683,474
	<hr/>	<hr/>
Remainder available	3,988,901	4,409,497
Previous balance.	1,072,885	71,116
	<hr/>	<hr/>
Total available	5,061,786	4,561,613
	<hr/> <hr/>	<hr/> <hr/>
To be employed on :		
Reserve as by by-laws	199,445	224,525
Shares	2,500,000	2,801,518
Quotas	383,333	358,973
Council	228,946	176,597
Meeting at Buenos Ayres	228,946	—
	<hr/>	<hr/>
Extraordinary reserve	3,490,670	3,561,613
	1,500,000	1,000,000
Balance.	71,116	—
	<hr/>	<hr/>
	5,061,786	4,561,613
	<hr/> <hr/>	<hr/> <hr/>

Thus the dividend was fixed at 28 francs a share instead of 25 francs as in 1915 and the dividend on quotas at 7.16 francs instead of 6.66 francs. It will be seen that, as in the previous year, a sum equal to annuities in arrears before the current year was deducted from profits and carried over to the special reserve.

The following is a comparison of the two balance-sheets :

	31 December 1915 frs.	31 December 1916 frs.
ASSETS.		
Shareholders.	25,000,000	25,000,000
Premiums to be redeemed on bonds . . .	29,478,638	29,223,239
Mortgage loans	214,873,903	195,573,088
Mortgage debtors for interest falling due	8,342,979	11,031,966
Properties.	995,038	2,969,303
Paper.	3,507,000	3,507,000
Bonds of the Defence	3,500,000	18,500,000
Various debtors.	4,060,671	8,282,048
Fiscal dues to be recovered	110,000	80,667
Order accounts	6,238,748	6,370,032
Instalments of dividends	—	1,000,000
	<u>296,106,977</u>	<u>301,537,343</u>
LIABILITIES.		
Capital.	50,000,000	50,000,000
Bonds	191,943,000	190,280,000
Reserve as by by-laws.	1,775,628	1,975,073
Extraordinary reserve	20,150,000	21,650,000
Reserve for reconstitution of premium to be redeemed.	2,817,217	3,374,569
Special provision	—	7,699,583
Various creditors	9,562,258	8,523,666
Order accounts	6,238,748	6,370,032
Interest on loans received in advance . .	71,221	85,834
Mortgage interest carried over	4,298,999	3,826,183
Profits and losses	9,249,916	7,445,088
	<u>296,106,977</u>	<u>301,537,343</u>

The inconveniences from which the Argentine suffers have naturally reacted unfavourably on the business of the Argentine Land Credit. On the other hand its business has been affected by general circumstances in an unexpected way, for although exportation has been limited the prices obtained for exported products have maintained the balance of trade in favour of the Argentine. Therefore and because of government measures for preventing gold from leaving the country, the conditions of the money market at Buenos Ayres were suddenly reversed, and certain mortgage

debtors took considerable advantage of the state of the European exchange, which had become very favourable to Argentine money, to repay the sums they had borrowed. We should notice that if the exchange favoured these debtors the Argentine Land Credit suffered none the less neither loss nor prejudice, for its loans are made in francs, that is in the same money as its capital in shares and the capital it has borrowed to develop its business, and in the money with which it must cover the costs of such borrowing.

This position, which facilitated the redemption of loans, made the re-employment of capital in loans in francs difficult. The company ran the risk of seeing its available funds left unproductive and the council decided therefore to make loans in Argentine gold money. By the end of the year a certain number of loans of this kind had been made, but the difficulties prevalent in the country restrain mortgage as they do other business, and the applications for loans were not numerous.

On 31 December 1915 the amount of loans was 223,145,077 francs. Repayments effected in 1916 amounted to 31,830,810 francs, reducing the amount to 191,314,267 francs. New mortgage investments otherwise amounted to 11,857,696 francs of which 7,598,875 francs were reassigned. Finally the effective amount of the mortgage investments of the Argentine Land Credit was 195,573,088 francs.

Current loans include urban loans amounting to 65,728,655 francs and rural loans amounting to 129,844,434 francs.

Among assets the Bonds of the Defence were increased by fifteen millions, accruing from the temporary re-employment of repayments of loans. Similarly the item "various debtors" shows an increase of 4,221,377 francs comprising bank accounts exclusively.

Among liabilities appears a special provision of 7,699,783 francs, amounting last year to 3,511,453 francs and then comprised in the item "various creditors". This provision was increased by 4,188,130 francs in conformity with a resolution passed at the last general meeting. This amount represents the sum of the interest acquired but not received in the years 1914 and 1915.

The "various creditors" item stands at 8,523,666 francs, having diminished by only 1,038,571 francs in spite of the subtraction of 3,511,453 francs for the special provision. The increase of accounts comprised by this item is due to a large proportion of new assignments to the various provisions which it includes.

AUSTRALIA.

THE SOUTH AUSTRALIAN LAND MORTGAGE AND AGENCY COMPANY IN 1916.

—*The Statist*, Vol. LXXXIX. No. 2,046. London, 12 May 1917.

The thirty-eighth ordinary general meeting of this company was held in London on 9 May 1917. The balance-sheet for 1916 showed that the debenture stock had been reduced by £39,290 and therefore stood at £74,510. Loans on mortgages amounted to £11,282; and the value of

properties in hand was £154,964, showing a decrease of £24,048 of which rather more than half was due to losses of live stock consequent on drought and floods. Investments amounted to £93,569; and cash in hand and at the bankers to £3,942.

Among items on the assets side of the account was £7,077 as the value of unsold wool. The company's clip of wool in 1916 comprised 987 bales. The total stock on stations on 31 December 1916 was 54,503 sheep and 18,194 cattle, as against 66,242 sheep and 22,741 cattle on 31 December 1915.

On 1 April 1917 £24,410 more of debenture stock was paid off, and debenture stock was thus left at £50,100.

The profit and loss account showed a credit balance of £8,549.

British and colonial income taxes, and land and absentee taxes paid by the company in 1916 amounted to £5,916.

ITALY.

1. THE "CREDITO AGRARIO PER IL LAZIO" IN 1916. — *Report on the year 1916. Rome, 1917.*

This institution for affording agricultural credit was founded at Rome by the law of 21 December 1902, No. 542. It had an initial capital of a million liras, of which 500,000 liras were obtained from the *Banca d'Italia*, 200,000 liras from the Savings Bank of Rome, and 300,000 liras from the Savings Bank of the Lombard Provinces. In order that it might increase its resources the "Credito Agrario per il Lazio" was also enabled to receive savings deposits and issue bonds on fixed terms.

It is active only in the Roman province. Its business consists of:

- a) operations by the medium of other bodies (agricultural consortia, rural funds, agricultural universities, societies for distilleries and cellars, etc.);
- b) operations with agriculturists directly.

Operations with these various bodies or institutions comprise: 1) the rediscounting of bills drawn on them by agriculturists, the institutions concerned being legally constituted, situated in the Roman province, and preferably co-operative in form; 2) the acceptance for discount of the bills of intermediary institutions, drawn for the purpose of continuing their business and buying on commission articles useful to agriculture, or for that of making advances in the case of collective sales of agricultural products, etc.

Operations with agriculturists directly comprise: 1) the acceptance for discount of bills drawn by agriculturists living in places in which there are no intermediary institutions or none able to undertake business of this kind; 2) the acceptance for discount of securities created by agriculturists, guaranteed by a privilege over seeds or pledged agricultural products.

Every loan, and every house or agricultural holding, is limited to the maximum sum of 5,000 liras. Where an operation is secured by a privilege this maximum is 10,000 liras.

The amount of operations secured by pledged agricultural products is fixed on the following scale : on cereals and wools 75 per cent. of the value of the pledge ; on oil 60 per cent. ; on straw, hay, wine, vinegar, spirits, etc. 40 per cent.

The term of operations is limited to a year, but loans to enable the purchase of live stock and machinery may be for three years.

When the chief results of the institute's activity in 1916 are shown it appears that its operations in that year aggregated 8,614,570.25 liras. Most of them, amounting to 7,660,134.75 liras, were with intermediary institutions. These were distributed as follows :

Agricultural consortia and comitiae	3,583,817.84	liras
Various societies affording agricultural credit . . .	1,900,396.90	"
Popular co-operative banks	671,037.30	"
Societies for distilleries and cellars	334,500.00	"
Savings banks	311,520.75	"
Rural funds	300,748.40	"
Societies for trading in, selling and exporting agricultural products	107,000.00	"
Agricultural loan funds	51,113.56	"
	<hr/>	
Total . . .	7,660,134.75	liras
	<hr/>	

The destination of these loans was as follows :

Cereal crops	2,397,139.40	liras
Vine growing	1,621,666.02	"
Sulphate of copper, sulphur, various fertilizers . .	1,234,809.73	"
Various crops	1,185,841.38	"
Stock farming	538,112.95	"
Olive growing	395,374.20	"
Agricultural machinery and implements	287,191.07	"
	<hr/>	
Total . . .	7,660,134.75	liras
	<hr/>	

The detailed description of these loans was as follows :

1506 bills of 1 to 50 liras	530,125.48	liras
5604 " 51 " 100 "	517,227.32	"
4659 " 101 " 500 "	1,228,663.00	"
1669 " 501 " 1000 "	1,367,468.99	"
1060 " 1001 " 5000 "	2,009,709.27	"
61 " more than 5000 "	2,006,940.69	"
	<hr/>	
15,459 bills for . . .	7,660,134.75	liras
	<hr/>	

The operations with agriculturists directly amounted to 954,435.50 liras, distributed according to their nature as follows: simple, direct discount 356,224 liras; rediscount of bills 180,461.50 liras; advances on pledged agricultural products 135,500 liras; advances on a privilege over seeds 282,250 liras. The destination of these loans was as follows:

Growing vines	141,634.45	liras
" cereals	550,647.14	"
" olives	48,527.07	"
Various crops	93,628.40	"
Sulphate of copper, sulphur, various fertilizers . .	20,154.90	"
Stock farming	9,843.54	"
	<hr/>	
	954,435.50	liras

On the operations with intermediary institutions the rate of interest oscillated from 5 $\frac{1}{2}$ to 6 $\frac{1}{2}$ per cent., on those with agriculturists directly from 6 $\frac{1}{2}$ to 7 $\frac{1}{2}$ per cent.

* *

2. LOANS TO AGRICULTURISTS FOR GROWING CORN AND OTHER CEREALS.
— *Gazzetta Ufficiale del Regno d'Italia*, No. 154, Rome, 30 June 1917.

A decree of the Lieutenant General of the Kingdom, dated 28 June 1917, No. 1035, contained the following provisions:

In order to facilitate loans intended to encourage the growing of corn, other cereals and edible tubercles, institutions of agricultural credit, authorized by special laws, may receive advances up to 20,000,000 liras, at 3 per cent.

They will give the sums received as advances to agriculturists directly whenever, for one reason or another, recourse to an intermediary establishment is impossible.

When the sums to be granted are asked for in order to provide seeds the institution of agricultural credit will give the landowner, in exchange for a bill signed by him, a bond authorizing him to withdraw merchandize in the quantity desired, at the cost price of the provincial consortium's granary.

The State will supply seeds for distribution to the granaries of the provincial consortia.

The rate of interest on the loans to be made with the sums received as advances must be so determined that it does not surpass 4 per cent. if loans are made to agriculturists directly by the institutions of agricultural credit, or 5 per cent. if they are made by means of intermediary institutions.

* * *

3. THE "FEDERAZIONE PER IL CREDITO AGRARIO NELL'UMBRIA" IN 1915.
Report of the federal council for 1915. Perugia, 1916.

The law of 2 January 1910, No. 7, on agricultural credit in Marche and Umbria (1) instituted in each of these districts a federation of those of their agricultural funds, rediscounting institutions, savings banks and co-operative banks which had associated themselves spontaneously. This federation has to administer the fund destined by this law to afford agricultural credit, namely 700,000 liras in Marche and 400,000 liras in Umbria. It has in particular the duty of endowing agricultural funds and employing temporarily capital of which the destination has not yet been fixed. The report of the council of the federation shows that on 31 December 1915 thirteen agricultural funds were active in Umbria. They had in that year effected loan and discount operations for a sum of 403,602.75 liras and their balance on 31 December was 169,745.98 liras ; namely 303,225.40 liras for the purchase of fertilizers ; 72,324.70 for stock, implements and machinery ; 11,050 liras for cultivation ; 7,162.15 liras for anti-cryptogamous substances ; 6,505.50 liras for seeds ; and 3,335 liras for the harvest.

* * *

4. THE DEVELOPMENT OF THE "BANCA DELL'ASSOCIAZIONE AGRARIA PARMENSE". *Bollettino dell'Associazione Agraria Parmense*, No. 14, Parma, 7 april 1917.

Some employers' agricultural associations in Italy have constituted agricultural banks. One of the most important of these is named in our title, the Bank of the Agrarian Association of Parma. It grants loans in the form of bills to its members and receives savings deposits even from outsiders. This bank limits its business to agricultural credit, thus encouraging the return to the soil of a large part of savings. It was legally constituted on 7 November 1908 in the form of a limited liability co-operative society having an unlimited capital in shares of the nominal value of 50 liras each. Its development appears from the following figures which refer to liras :

(1) For the organization of agriculture in Marche and Umbria see our issue for June 1915, pp. 61 et seq.

	1914	1915	1916
General turnover	56,088,791.13	113,248,525.77	254,464,304.73
Turnover of the till . .	26,464,111.32	83,518,477.50	177,854,106.08
DEPOSITS:			
Received	5,073,655.84	17,286,973.53	48,280,827.55
Paid out	5,039,643.58	13,300,406.74	41,703,955.50
Turnover	10,113,309.42	30,787,380.27	89,984,783.05
Balance 31 December .	3,038,415.50	6,825,022.29	13,401,894.34
CAPITAL IN SHARES AND			
RESERVE	318,866.95	343,901.16	386,036.76
PAPER:			
Bills received	9,390,757.12	16,368,624.28	28,686,920.79
" issued	9,296,671.67	13,438,500.87	23,959,959.28
Turnover	18,687,428.79	29,807,125.15	52,646,880.07
Balance 31 December .	2,073,946.68	5,004,070.09	9,731,031.60
STATE SECURITIES . .	409,500.00	1,021,290.00	2,982,553.93

This bank pays interest on ordinary free savings deposits at the rate of 3 $\frac{1}{2}$ per cent. ; and on engaged savings deposits at the rates of 3 $\frac{3}{4}$, 4, 4 $\frac{1}{4}$ and 4 $\frac{1}{2}$ per cent., according to the importance of the sum and the term for which it is engaged. It also receives small savings deposits at 3 $\frac{3}{4}$ per cent. and deposits on current account at 3 per cent. It lends, discounts, opens current credit accounts, makes advances on pledged provisions and issues interest-bearing bonds.

* * *

5. THE "BANCA DI CREDITO AGRICOLO" OF FLORENCE IN 1916. *L'Agricoltura Toscana*, No. 6, Florence, 31 March 1917.

This Bank of Agricultural Credit was founded at Florence in 1913 with the object of advancing capital to its members in order that they might stock their holdings and buy agricultural machinery and implements, seeds, fertilizers and all farming requisites. The bank on 31 December 1916 had 403 members having 858 paid-up shares, that is 85,000 liras of paid-up capital. In 1916 it placed at the disposal of its agriculturist members 1,401,060.39

liras, of which 773,360.50 liras represented renewals and 627,699.89 liras fresh operations. Deposits on current account amounted on 31 December 1916 to 93,725.92 liras, as against 49,481.95 liras on 31 December 1915. In order more and more to encourage small savings, special savings-bank books were made, giving interest at the rate of 4 per cent. for deposits withdrawable at sight and $4\frac{1}{4}$ per cent. for those for fixed terms. Net profits amounted to 2,096.50 liras, distributed as follows : 20 per cent. to the ordinary reserve fund — 419.20 liras ; 10 per cent. to the employees — 209.65 liras ; 10 per cent. to agricultural propaganda — 209.65 liras ; 30 per cent. to the extraordinary reserve fund — 628.96 liras ; 30 per cent. carried over — 628.96 liras. Thus the reserves amounted on 1 January 1917 to 4,121.19 liras or 4.80 per cent. of the subscribed capital in shares.

Part IV: Agricultural Economy in General

GERMANY.

RECONSTRUCTION AFTER THE DESTRUCTION FOLLOWING ON EVENTS OF THE WAR IN EAST PRUSSIA.

OFFICIAL SOURCE :

VERORDNUNG BETREFEND DIE UMLEGUNG VON GRUNDSTÜCKEN IN DER PROVINZ OSTPREUSSEN
(*Ordinance as to the Redistribution of Pieces of Land in the Province of East Prussia*).— Preussische Gesetzsammlung, No. 51, 1915

The legislative measures adopted for reconstruction, in the districts of East Prussia destroyed or damaged during the military operations which took place in the beginning of the war, are the results of legislative work extending over all 1915. They cover of course very important questions as to redistribution and the creation of mortgages, and are in these respects the evidence of a methodically elaborated system. To study it cannot be other than interesting from a general point of view; and will give a hint of possible enterprise which would complete the means of interior colonization already habitual.

The measures are justified by the events which caused them and by the tenour of the Prussian constitution of 1850. Article 63 of this allows the king to legislate in case of urgency. Accordingly on 15 January 1915 a first royal ordinance authorized the Higher President of the province, with the consent of the provincial council, to apply, in those urban districts and rural communes having more than 2000 inhabitants which had been ravaged by the war, the provisions of the law of 28 July 1902 — 8 July 1907 as to the modification of the position of real estate in Frankfort-on-Maine. Subsequently on 11 December 1915 a second royal ordinance introduced into the first certain modifications which did not however prevent the essential prescriptions of the cited law from being maintained. The unified text,

co-ordinating these provisions, was promulgated on 21 December 1915 and afterwards ratified by the two chambers of the Landtag (1).

Further an ordinance of 1 May 1916, completed by a ruling of the public administration dated on the 9th of the same month, provides that loans granted by the State for the construction or reconstruction of destroyed or damaged buildings shall be secured by a mortgage on the real estate.

Such are the legislative elements going to make up these measures of which we will now set forth the chief features.

§ 1. CONDITIONS OF REDISTRIBUTION AND PRELIMINARY PROCEDURE.

The power to undertake redistribution on certain parts of the communal territory has been given to the Higher President. In communes having more than 2000 inhabitants he must do it with the consent of the municipal council, in those which are less important with that of the commission of the circle. This redistribution will affect landed property belonging to different owners and will aim at constituting suitable lots of building land and opening up new areas for building. Consideration of the public advantage must of course always be the basis of the undertaking.

An area for redistribution must first be determined, and it must extend over only part of the communal territory ; for if redistribution is to be beneficial it must be applied only to the area judged necessary for the end in view. In determining the area regard must be paid in particular to the configuration of the soil and the roads which are in existence or are anticipated by the plan for reconstruction. Certain real estate included in the area may be excepted from redistribution, entirely or partially, either because there are buildings on it, or because it is appropriated to especial uses, as horticultural establishments, nurseries, parks, etc.

A further annexation of real estate situated outside the redistributed area is anticipated. If the interested landowners do not consent to this complementary annexation the measures used in the case of the determination of the original area will be applied.

Redistribution will take place when the deliberations of the commune are followed by a request of the municipality ; and also on the demand of the majority of the proprietors owning more than half of the surveyed area, whether built or unbuilt, of the real estate to be redistributed. In making calculations, where properties owned in fractions by various persons are concerned, the proportionate right of each owner will be taken into account.

No prohibitions to alienate may be made in opposition to the redistribution. The redistribution may not be carried out if the larger part of the area it would affect is employed by owners who themselves draw profit from it by gardening.

(1) Collection of laws of 17 July 1916, p. 111.

When the municipality has decided to bring about a redistribution, in the conditions which have been indicated and following the preliminary procedure which has been explained, intimation must be made to the authority responsible for the control of construction. A statement as to the real estate must also be drawn up, giving the name of its owners, its designation according to the cadaster and the land books, the proportion of which owners must be dispossessed, the proportion to be used, according to the plan for reconstruction, for public roads and squares, and the interval of time which will elapse before these latter are given up to traffic and construction. A plan will be annexed to show the situation and extent of the real estate to be redistributed, the buildings which may be placed on it and the particular use to be made of it. The statement and the plan will be available for inspection by those interested and complaints which may be made within a period of not less than a week will be heard. A special notice will however be issued to the competent authority when real estate permanently appropriated to the exercise of rights belonging to the State is in question.

The municipality must endeavour to satisfy complaints as far as possible and then transmit without delay to the commission of the circle the request for redistribution and all pertinent documents. The commission decides, after hearing the local controlling authorities, as to whether the conditions for redistribution, as these have been set out, exist, and as to complaints which have not been satisfied.

With the consent of applicants the commission can decide on the costs or partial costs for which they become responsible. Its decision must be signified to the municipality, the landowners and the interested persons who have had part in the proceedings, and the municipality is responsible for publishing it.

The interval which allows of appeal to the provincial council against the decision of the commission of the circle is of only one month (1).

The demand for redistribution can be revoked only before the decision of the commission of the circle is made. Such revocation can be made by means of a declaration of the owners of more than two thirds of the area covered by the demand. Costs are borne by those who thus revoke a demand they have made, their contribution being exacted from them by the municipality and received by the communes according to the procedure for forced recovery.

When the commune and the landowners have entered into a binding agreement as to the redistribution, the procedure for redistribution will be omitted if the municipality and the majority of the landowners, in the proportion already mentioned, ask for such omission.

If such agreement affect only part of the area to be redistributed, so that the object of redistribution can still be attained where the agreement has force, and if the owners suffer such limitation, or a further redistribution of

(1) By the terms of Article 121 of the law on the administration of the kingdom, dated 30 July 1883, this interval would have been of fifteen days.

their real estate is not excluded, the procedure for redistribution will be followed.

To allow these arrangements to be made the district commission can fix a period during which the procedure for redistribution will be suspended. Such delay will be imposed at the request of the municipality, or the majority of the landowners to whom the commission would allow the right to deposit in common with the municipality the demand for redistribution.

Decisions are made by the district commission in the form of resolutions, which are final if the delay already mentioned has been imposed.

§ 2. PROCEDURE FOR REDISTRIBUTION.

1. *Area Declared Open. Commission for Redistribution.* — As soon as the Higher President esteems that one or more redistributions may be made he declares in the case of each individual area that proceedings are open and names an executive commission. One commission may even have charge of several redistributions.

There will belong to this commission as members : a) two commissioners of the Higher President of whom one at least is a juriconsult able to fulfil the functions of a judge ; b) an expert architect ; c) a certificated geometrist ; d) a higher administrative official ; e) an expert for the valuation of the real estate. The Higher President will nominate all the members of this commission and a deputy for each of them, and will choose a president and vice-president from their number. Members of the municipality cannot belong to this commission. The Higher President of the province and the presidents of districts have the right to be present at the meetings personally or to be represented at them.

The members of the commission have the right to the reimbursement of their expenses and to emoluments calculated according to the prescriptions having force in the case of experts before the tribunals, unless they are already paid as State officials.

Resolutions of the commission are valid if passed at a meeting to which all the members, the president and the vice-president have been summoned and which half the members attend. They are passed by a majority of votes, the president having a casting vote.

The commission is represented judicially and extra-judicially by its president. The opening of proceedings for redistribution and nomination of the commission are communicated to the public in accordance with local custom.

2. *Registration of Redistribution.* — On the demand of the commission the office of the land book must register in the land book the opening of proceedings for redistribution.

The commission must be aware of the contents of the land books. If necessary it can claim copies of them. Entries made after the first re-

gistration of the opening of proceedings will be communicated by the office to the commission.

3. *Principles of Redistribution.* — Real estate intended for redistribution and existing public roads and squares will be massed. When allotment is made the land necessary for the public roads and squares will first be set aside and transmitted to the commune or any other body responsible for maintaining the roads.

The remaining land will be divided among the landowners with a view to equity and the best means of attaining the object of the redistribution. As much as possible, the part which each landowner previously held of the total area will be taken into account. The lots should stand at right angles with the streets and be remitted to the landowners in their former condition. The sites of buildings, for which a special indemnity would be payable, should be left to the existing owners.

Coproprietorship or a former common employment of property will be ended by assigning to each interested owner an isolated lot corresponding to his previous partner's right.

The question of indemnities is met and treated in equal detail. An indemnity will be granted for land employed with a view to the establishment of public roads and squares in excess of the area of those included in the massed real estate, if this land surpasses that contributed by the proprietors by 35 per cent. when redistribution is undertaken at the request of the municipality, or by 40 per cent. when it is undertaken at the request of the proprietors.

In addition to their right to allotments proprietors have the right to pecuniary indemnification, *a)* for buildings or other accessory or essential parts of the redistributed real estate taken from them ; *b)* for the depreciation of redistributed real estate unless the lot assigned to the owner is equivalent compensation ; *c)* for the loss of an industry based on the use of the real estate. It should be noticed on the other hand that any appreciation of the real estate consequent on the redistribution is left out of account. If however the real estate to be redistributed is burdened with dues, the commission may oblige the owner to pay a sum equal at least to the value by which the real estate was depreciated for him by such dues.

If the parcels to be assigned are too small they will be fused. If they ought to be assigned to several owners they will be assigned to them *en bloc* in coproprietorship, mention being made of the individual interest of each and the various charges which each incurs ; for it seems that it will be possible to extinguish coproprietorship only when the isolated parcels are sufficiently extensive to allow of building. If no agreement is reached the whole indemnity should be allotted only in money but the sum with which the proprietor has been charged as a contribution to redistribution will be subtracted from its amount.

It is the commission which decides on the possibility of building after having heard the advice of the authority responsible for the control of buildings.

Interested persons whose rights in the real estate are suppressed or

modified, whether they be proprietors, leaseholders or farmers, should be specially indemnified, the commune being considered in this case as the expropriator.

When the plan for construction on the area to be redistributed has been definitely fixed it cannot be modified during the process of redistribution without the consent of the commission. The municipality may however be asked to allow modification in order to facilitate redistribution. In any case the plan for reconstruction should be fixed before the plan for allotment is determined.

A fixed interval will be allowed for bringing the public roads and squares into good state, and authority to build may not afterwards be refused.

In order to reach the object of redistribution the commission may preserve existing services due from the land or create others. It may carry over to an assigned parcel other rights of real estate, reserving a just indemnity, so long as the exercise of such rights does not notably prejudice the holder and they are not in opposition to the objects of redistribution. The commission must also distribute, as far as is necessary, public charges burdening real estate as a consequence of property in the soil.

The plan for allotment must as far as possible be established with the consent of those interested and in a manner which renders the payment of indemnities in cash superfluous.

The arrangements made will be respected by the commission, which will not be able to revoke them if the other owners of real estate accommodate themselves to any restrictions which may arise out of them, and if they are not prejudicial to the execution of the redistribution as conditioned by the provisions of the present law. The same holds good when these arrangements between the commune and the proprietors are not binding in form.

When in the matter of a discharge or assignment of indemnity the interests of the commune are opposed to those of the proprietors, the president of the district should give the proprietors a curator and representative. These may then form a community of interests and plead in a court of justice. The curator has the status of a legal representative and can be chosen from among the proprietors; and when he has been nominated the commune must at his request advance to him his costs including those necessitated by judicial proceedings. A suitable indemnity, fixed by the commission, is also allotted to him at his request.

The expenses incurred by the commune, as compensation for property devolving on it, are excluded from distribution among the proprietors, except the indemnities in cash due to the proprietor for losses and depreciation and the expenses and indemnities of curators.

This distribution is made with due regard to the profit derived by each proprietor from the redistribution, and to the length of façades and the area, site and value of the parcels assigned. At the request of the proprietor the payment of the contribution for redistribution may be deferred, interest at the rate of $3\frac{1}{2}$ per cent. being charged until the time of sale or construction.

When the whole amount of payments, including payments for joint ownership, compensation and other dues to the commune, and indemnities and compensation due from the commune, surpasses the total sum of the expenses to be shared, the commune is obliged to pay this sum to the proprietors.

Interested persons should prove their rights as soon as these can be defined, and should do so as far as possible before the commission for redistribution or the district commission. Failing this, these commissions may charge them with the costs consequent on their tardy action.

4. *Drawing up and Fixing the Plans for Redistribution.* — The commission must draw up a plan for redistribution with a map, showing the former and the new sites of the properties, and giving the details of redistribution, and all other indications as to indemnities, payments for joint ownership, compensations and contributions for redistribution. The commission will discuss this plan and the map with those interested in it who must appear at the meeting and defend their interests. Among them the local police, who must be enabled to give weight to their interests, must not be forgotten. In so far as the interests of the police are involved the plan for allotment should be made as much as possible in agreement with the police.

The commission will legislate as to the establishment of the plan for allotment and the map, and especially as to the modifications and additions which those interested may claim. In case of need it will rectify and complete the plan and map as it may resolve. The plan will mention the results of arrangements with interested persons as often as these are not opposed to the end followed. For such resolutions there must be present, in addition to the president, at least an expert architect, a certified geometrist, an administrative official and an expert for the valuation of the real estate. If the president is not a jurisconsult, able to exercise the functions of a judge, a second representative, nominated by the Higher President and capable of exercising such functions, must be present.

When once the resolution has been passed the plan and map will be communicated to each interested person, the parcels assigned to him being pointed out; and the plan and map will be available for public inspection. There will be an interval of two weeks during which complaints may be made to the president of the commission.

If it be necessary to suppress or redistribute public roads the authority of the police of the roads must be advised. Opposition to such suppression and redistribution should be made during the course of the proceedings.

If complaints are made against the plan the commission should endeavour to meet them by negotiation. If this cannot be done the action taken and the discussion should be submitted to the district commission which decides in the last resort.

5. *Appeals.* — To safeguard rights to indemnities in cash those interested may appeal against the plan for allotment from the moment of its determination. Appeals will be received during an interval of two months counting the day of allotment. In the case of those interested persons who ought to be informed of the declaration of assignment, this interval lasts

for two months after they are thus informed. If a representative and curator has been nominated he should make the appeal against the commune and the commune against him.

6. *Execution of the Plan for Allotment.* — An appeal does not suspend the execution of the plan for allotment, which ensues when the district commission has resolved on a declaration of assignment. This resolution indicates the day on which rights will be transferred in as far as the redistributed real estate is concerned. At least a week will elapse between the resolution and the transference. The declaration of assignments must be communicated to all interested in it and published without delay, in conformity with local custom, by the municipality. From the time of such publication the contents of the plan of allotment will have effect. Previous property rights in the redistributed real estate are extinguished. At the same time the real estate is emancipated from all charges and restrictions on private right. It loses in particular the status of trust or family estate, and ceases to be held in fee or burdened because of a loan. The transference of rights is therefore complete ; but exception must be made of the hereditary right of exploitation, as in the case of a mine, of services, the rights of redemption and pre-emption, and of charges on the real estate which do not consist merely of dues in money or kind or personal service — all this saving in the case of other provision in the plan for allotment.

The office of the land book must register, at the commission's request, changes which occur, transferences of rights and charges, and any creation of new charges.

In so far as the deposit and employment of cash indemnities are concerned, where real estate is held in trust, as a family property or in fee, or is burdened because of a loan or by real estate charges, mortgages, debts on the land or rents, the provisions of articles 37 and 38 and 47 to 49 of the law on the expropriation of real estate, dated 11 June 1874, and the provisions of articles 35 to 41 of the law as to the imperial law on forced awards and administration, dated 23 September 1899, will be applied by analogy, except that instead of the proprietor of the real estate the commission for redistribution may equally, in the case of article 49 of the first of the laws mentioned, call upon the competent authority to bring about the liquidation.

7. *Complementary Plan for Allotment.* — This plan is applicable to further distributions of assets and liabilities to which the procedure followed may give rise. The principle of a further distribution among the new proprietors is also applicable to contributions which cannot be recovered. Recoveries will be made in the same conditions as the administrative procedure for coercion at the request of the commune. When the obligations resulting on payments for joint ownership, benefactors or contributions have been met, the office of the land book will cancel the correspondent entries.

§ 3. FINAL PROVISIONS.

Certain other cases are anticipated, and there are certain definitions of methods of applying the law and of cases in which the preceding provisions cannot be applied. It will be useful to define the category of interested persons.

This includes the communes, the proprietors, the mortgagees of land, those having a right to rents, and persons having a hereditary right of usufruct or exploitation, especially where mines are concerned. It includes also persons who have a right affirmed or guaranteed by registration in the land book, and those who have any right in the real estate to be redistributed or any right burdening it, the leaseholders or farmers who occupy it in consequence of a farming or other lease, and, in the case of a forced award or administration, the pursuing creditor. Interested persons whose right has not been registered in the land book must establish the credibility of such right at the request of a proprietor, the commission or the authority before whom the proceedings for redistribution are pending. They are otherwise excluded from participation in the proceedings.

The commission for redistribution has the right to require the office of the land book to rectify the land book by registering a property, and to oblige its proprietor, on pain of a fine, to produce the documents it deems necessary to prove the right of proprietorship.

Persons who take part in the war (article 2 of the law of 4 August 1914) or who leave the country because of the war and do not return to it, may, if they have no representative, have one assigned to them for the safeguarding of their rights by the Higher President of the province.

They must if possible be informed of the nomination of their representative, which they may revoke, nominating another. Special costs incident to the nomination of a representative are included among costs of procedure.

If there be a judiciary dispute as to the right by which participation in procedure is claimed, both parties to the dispute are deemed to be "interested".

The case is anticipated of a necessity to suspend proceedings for redistribution when circumstances, notably those connected with claims for indemnities, cause fears that these proceedings will be financially unprofitable or involve the commune in disproportionate expense, or when these proceedings appear superfluous.

§ 4. THE SECURITY FOR STATE LOANS FOR THE RECONSTRUCTION OF BUILDINGS DESTROYED DURING THE COURSE OF MILITARY OPERATIONS.

This matter is regulated by the ordinance of 1 May 1916 which we have already noticed. For its purpose the State grants redeemable loans, bearing no interest, secured by the entry in the land book of a guaranteeing

mortgage equal in amount to that of the loan, and of a preference over all other and private charges which may burden the real estate. These rules do not however apply to buildings which in virtue of a right have been erected on another's soil (article 95, paragraph 1, 2nd phrase, of the German civil code).

When the loan has been granted, the authority competent to allot the war or the provisional indemnity should certify whether and in what measure the granted loan has been usefully employed, within the limits of the approved plan for reconstruction.

If the loan is certified to have been usefully employed the guaranteeing mortgage enjoys, while and in the measure in which it does not become united with the mortgaged property in the tenure of one person, a preference over other charges arising out of private rights and burdening the same property.

As the debt is extinguished the guaranteeing mortgage loses its preference over anterior charges.

It should be noticed that these rules are, by analogy, applicable to buildings erected in virtue of a building right.

Certain complementary conditions are contained in the interministerial decree of 9 May 1916. Redemption will begin after an interval of five years, calculated from a date to be subsequently fixed by the Minister of Finances. The annual payment for redemption is fixed at 3 per cent. of the amount of the loan and is payable half-yearly on 1 October and 1 April. The loan may be called for at once if transference takes place except by succession or by a legal act practically equivalent to succession, such as a reserving contract. Exceptionally a transferee may still benefit by the loan if the alienation has been justified by economic reasons. If the property remains in the possession of the person who has suffered loss, or of his legal heirs who are so in right of succession or a legal act practically equivalent thereto, a quarter of the original sum of the loan is remitted at the end of five and another at the end of ten years, beginning at a date to be generally fixed by the Minister of Finance.

ITALIAN COLONIES.

LIBYA.

(TRIPOLI AND CIRENAICA). LAND SYSTEM AND COLONIZATION.

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§ I. GENERAL REMARKS. ADMINISTRATIVE ORGANIZATION.

A. General Remarks. — Libya which is composed of Tripoli and Cyrenaica embraces the territory between the eastern frontier of Tunisia and the western limits of Egypt, between Ras Agir and the Gulf of Sollun, and reaches in the interior as far as Tassili on the high plateau of the Azgier and as far as the Tummo Mountains which mark the geographical boundary between the desert of the Fezzan and the Sahara properly so called; that is it covers about 10 degrees from north to south (from 33° to about 23° northern latitude) and 14 degrees from west to east (from 11° 30' to 25° 20' longitude). The southern and eastern frontiers and a large part of that which adjoins the French hinterland are however indeterminate. The estimates of area therefore vary from 800,000 to 1,500,000 square kilometres (1), the latter figure being reached by including the quadrilateral of

(1) 1 Square kilometre = 247.114 acres.

the oasis from Cufra to Giarabub (1). The generally accepted average area is a million square kilometres. The breadth from east to west is about 1500 kilometres (2) and the length from north to south, measured from the extreme points including Fezzan, 1150 kilometres.

Libya has no geographical unity. It is, as Reclus wrote, composed of various countries separated the one from the other by uninhabited and even uninhabitable solitudes; for the desert, or at least the steppes which precede it, reaches to the coast of the Syrtis Major. The territory between Cyrenaica on the east and the Gariana Mountains in the south of Tripoli has characteristics both of the Mediterranean zone and of the Sahara, but South Tripoli belongs wholly to the desert. This state of affairs is today taken into account when Libya is divided into two great districts, Tripoli and Cyrenaica.

The southern frontier of Tripoli, properly so called, is marked by the northern boundary of the high stony plateau, known as Hammada el Homra, in which vegetation ceases. To the west Tripoli stretches as a homogeneous district as far as the beginning of the dunes of the Great Eastern Erg and the Duiat Mountains, the natural limit of Gefara, which is crossed by the Ouadi Motta, the political frontier of Tunisia. To the east the apparent natural frontier is the western shore of the Syrtis Major as far as Ouadi Semssem, beyond which point the characteristics of the northern steppe are lacking. Physically there are three regions in the district of Tripoli, the coast, the plain or Gefala and the high plateau or Gêbel. In a wide sense Cyrenaica comprises all the territory which extends from the Syrtis Major and the Mediterranean coast on the north to the oases of Angila and Gialo on the south and to the Gulf of Sollum on the east, that is from 19° to 25° longitude and from 29° to 33° northern latitude.

The population is estimated at between 900,000 and a million.

B. Administrative Organization. - The administrative organization of Libya is principally based on the royal decree of 9 January 1913, no. 39, which provided for the organization of government in Libya (3), and on the royal decree of 15 January 1914, no. 35, which approved the political administrative organization of Tripoli and Cyrenaica (4). In virtue of these decrees Tripoli and Cyrenaica were formed into two separate governments, each directed by a governor who also commands the land and sea forces on the land and waters within his jurisdiction. He is nominated by royal decree on the proposal of the Minister of the Colonies in concert with the Minister of War, both of whom have been advised by the Council of Ministers. He depends immediately and exclusively on the Minister of the Colonies, and he directs the colony's policy and administration in conformity with that minister's instructions. He may make rules of a

(1) According to *Annuario Statistico Italiano*, 1914, the area of this is from one to one and a half million square kilometres.

(2) 1 kilometre = 1093.633 yards.

(3) *Gazetta Ufficiale d'Italia*, 14 February 1913, No. 37.

(4) *Ibid.*: 7 February 1914, No. 31.

local character and impose penalties for their infraction. The Minister of the Colonies may delegate to the governor such powers emanating from the royal government in respect of Tripoli and Cyrenaica as are susceptible of delegation.

The seats of the governments of Tripoli and Cyrenaica, are, respectively, at the towns of Tripoli and Benghazi. The officials depending immediately on the governor are the general secretary for civil and political affairs, the chief of the military police office and the chief of the headquarters staff. The general secretary for civil and political affairs is nominated by royal decree on the proposal of the Minister of the Colonies and has the rank of a prefect. He must follow the governor's general instructions, is at the head of all civil offices and treats directly with the local authorities and native chiefs within the areas or parts of areas which have, on the governor's proposal, been declared zones of the civil government.

The territory of Tripoli and Cyrenaica is divided into regions, *circondari*, and urban or rural districts. At the head of a region there is a general commissioner on whom depend the delegates of *circondari* who are at the head of these. In the capital of the government the functions of regional commissioner and delegate of *circondario* are assigned to the general secretary of civil and political affairs. In the capitals of regions the functions of delegate of *circondario* are assigned to the regional commissioners. The urban district depends on the delegate of *circondario* and is directed by a municipal administration. A district agent is placed over the central district and depends on the delegate of *circondario*. At the capitals of *circondari* the functions of district agent are discharged by a *circondario* delegate. In special cases one or more *circondari* or districts may be placed in direct dependence on the governor or the special commissioner.

The regional commissioners are exclusively nominated from among the Italian civil or military officials. The *circondario* delegates and district agents are generally chosen from the native dignitaries and chiefs who are Italian subjects. Within his region the regional commissioner represents the governor, and in accordance with the latter's instructions he exercises the functions which devolve on him in virtue of laws and decrees, or which are delegated to him by the governor.

Article 6 of the rules specifies the functions of the governor ; article 7 those of the *circondario* delegate ; article 3 those of the district agent.

The institution of native councillors and regional councils gives the native population a legitimate means of expressing their opinions and aspirations. Native councillors are therefore nominated at the seats of government on the governor's proposal, and they advise, either together or separately, on questions of administration which are of interest to the government and on which the governor thinks it well to hear them. In every regional capital a council is formed, composed of the commissioner as president and a native chief or notable for each circumference and district within the region. The governor chooses one of these for each of the territorial divisions on the advice of the respective delegates and agents. Italian citizens and subjects, nominated by the governor and as numerous as

he judges opportune, also belong to this regional council. It is wholly renewed every three years.

Not only does this council pronounce on business submitted to it in conformity with laws and decrees, but it also advises on questions interesting to the *circondario* which the commissioner deems it well to bring before it. Clause II of the royal decree of 15 January 1914, no. 35, amply treats of the organization of urban and rural districts.

In the matter of the consultative agencies of the colony, of which we have just spoken and with which chapter II of the first clause of the cited decree is concerned, it should be noted that the royal decree no. 469, dated 11 March 1917, lately made certain pertinent modifications (1). In accordance with this last named decree native consultative committees for Tripoli and Cyrenaica and a central mixed consultative committee at the Ministry of the Colonies at Rome were created.

Other ordinances contributed to giving either at home or within the colony a special structure to the governmental function, suited to the particular exigencies it has to meet.

Thus at the Ministry of the Colonies two consultative committees were formed, one for administrative matters concerned with finance (royal decree of 11 January 1914) and the other for public works (royal decree of 15 January 1914). These comprise a small number of members, especially officials of other great administrative or consultative bodies of the State. As a pendant to the higher administrative committee of the Ministry of the Colonies a council of government, under the presidency of the general secretary and composed of the chiefs of local offices, has been constituted at Tripoli and at Benghazi.

Since the law of 25 February 1912 established Italian sovereignty over Libya it was necessary to make clear the jurisdictional relations of the population with the State and regulate relations among subjects. The need was met by the royal decree of 6 April 1913 which established, in harmony with the principles of Mussulman public law, that all Mussulmans residing in Libya are by presumption Italian subjects and that they can lose such status only if they are freed from it by the government. The decree determines who are to be considered subjects in virtue of birth, ties of blood or marriage; and it admits subjects to service in the territorial and maritime colonial forces and in the colonial administration. The pertinent rules were comprised in the royal decree of 6 February 1913 as to the civil service of the State.

Administration of justice in Libya is regulated by the royal decree of 20 March 1913.

Other decrees concern the police, the health service (2), the organization of schools (3) and of public services and works (4), rules for the con-

(1) *Gazzetta Ufficiale*, No. 72, 27 March 1917.

(2) Royal Decree of 8 January, no. 15, as 1914, to the sanitary organization of Tripoli and Cyrenaica.

(3) do. of 15 January 1914, no. 56.

(4) do. of 15 January 1914, no. 76.

struction and working of the State railways (1), the military organization (2), the organization of the postal and electrical services (3), the code of the merchant navy (4), etc.

§ 2. THE LAND SYSTEM.

From the time Libya was first occupied, on 20 November 1911, a royal decree forbade, with a view to preventing speculation and engrossment, the purchase and sale of land. But this measure has an obviously transitory character and did not make any less urgent the solution of a problem which had early shown itself to be very difficult and of capital importance, the problem namely of organizing property in land.

Under Turkish dominion the cadaster applied in Libya, although only in part of the territory, made the proof of title to a property depend on the registration of particular holdings, and therefore ownership of a holding could only be proved by presenting a document called the *tapu* which showed that it had been regularly inscribed on the land registers. But during the war all the land offices were destroyed and the registers and documents were dispersed.

The royal decree of 26 January 1913, no. 1913 (5), is concerned with the proof of rights to land in Libya. For the purpose of such proof land offices were set up in the principal centres of the colony to provide for the determination and preservation of landownership. To each of these offices a consultative commission of notables is attached.

These offices must keep special registers containing all necessary data for the exact determination of properties and rights in them, the description of the real estate or the rights held in real estate, its boundaries, area, the nature of the right or title to it, general remarks as to the title-holder, rights of property burdening it, rights-of-way with necessary indications as to how these affect the new title-holder, and, where title-deeds are onerous, the price of such deed. A register is divided into two parts, the one for urban and the other for rural property, and is kept in chronological order in the Italian and Arabic languages.

In addition to the general register another register must be kept in every land office; (a) for the domanial properties (*miri*); (b) for the property of religious foundations (*vacuf*); (c) for the property held collectively by tribes and villages (*metruke*); and (d) for the property held freely (*mulk*).

Ottoman land registers which still exist or which can be reconstituted give complete proof of free property (*mulk*), and also of absolute titles to property (*tapu*) formerly ceded under the Ottoman cadaster, of provisional

(1) *Gazzetta Ufficiale*, of 9 March 1913, no. 314.

(2) do. of 22 January 1914.

(3) do. of 12 June 1913, no. 708.

(4) do. of 23 June 1913, no. 902.

(5) do. no. 34, 11 February 1913.

titles ceded by the former agencies of the local cadasters, and of the acts of transference (*huggé*) ceded by the cadis before the institution of the cadaster. Saying where the Ottoman land registers still exist it is required that existing possession and title shall correspond. Contracts of purchase and sale made after the royal decree of 5 November 1911, no. 1247, and final pronouncements of the judicial authority are absolute evidence of free property if they do not violate the royal decree of 20 November 1911, no. 1248, and if the seller's title has been remitted to the purchaser or annexed to the contract of sale. Such titles are valid as full proofs if they are not impugned as being false and if certificates of them are definite in character, except in the following circumstances.

For every property definitely certified there is drawn up a new title in which the reference of the title and of other relevant documents, from which the ownership has been ascertained, is indicated, and in which all data prescribed for the land register must be found. The new title is remitted to its holder on presentation of the old title, except when the latter is proved to have been lost or destroyed. The old title is then annulled and delivered to the keeping of the land office.

Rights definitely established and certified are inscribed, in conformity with the new title, in the general register and on the land books.

Rights definitely certified and established cannot be impugned by anyone, except 1) in the case of fraud, falsification or error affecting fundamentally the fact established; 2) when a document proving the contrary fact and not previously produced is found after certification; 3) by *force majeure*; or 4) another and contrary certification having reference to the same property. These actions for annulment are not detrimental to the rights which third persons may have acquired, in good faith and for considerations, in the real estate in question. The actions are brought before the local judicial authority to contradict and oppose the persons in whose favour certification has been made. These actions and their results are noted in the general register and the land books.

If the titles already mentioned contain omissions or imperfections certification is made provisionally, on the basis of actual possession and all the evidence of property to be discovered, including certificates (*il muhabber*) of the Imans and Mukhtars. When once instructions have been issued, following the procedure indicated in article 10 of the aforementioned royal decree of 26 January 1913, the provisional title is registered and remitted, the registration and remission being publicly declared.

Within two years of the time of declaration any interested person may impugn the provisional certification before the local judicial authority. If after two years no objection has been raised or only such as has been met, the registration becomes definite and the title-holder receives a definite title. All transferences or assignments of property, whether from one living person to another or in consequence of a death, a division of property or the formation of a society, and every constitution or cession of property rights, must be entered in the registers of the land books and on the title.

and are valid, even among the parties concerned, only from the date of such entry.

The land books are public. They may be consulted or extracts from them may be obtained as the ministerial decree of 20 July 1913 rules.

This decree approved the rules to be followed in executing the royal decree of 26 January 1913, no. 48, which we have already resumed, as to the certification of property rights in Cyrenaica and Tripoli. Chapter I of these rules concerns the land offices, namely their formation and staff, and the nomination of the consultative commission which must advise in all cases of impugnments of provisional certification. Chapter II treats of the land registers, both general and special, for (a) the domanial property; (b) the property of Mussulman religious foundations; and (c) property held collectively. Chapter III treats of the land books of free property, the complementary land books and registers of papers, and inscription in the land books. Chapter IV deals with definite and provisional certification of free property, general rules for certification, applications for certification, deeds and papers of certification, special rules for the provisional and final certifications of free property, impugnments of provisional certification, actions against certification and judgements against the negative results of certification. Chapter V concerns the certifications of property rights in estates of the domain, held by Mussulman religious foundations or held collectively. Chapter VI deals with titles to free property and the cession of these, final or provisional titles and complementary papers, and the cession of titles. Chapter VII treats of registration after certification, general rules, various operations involving new entries in the land books owing to the rectification of a material error, new construction, division, modification of the condition of real estate, etc., and variations relative to the different categories of properties. Chapter VIII is concerned with general provisions, the keeping of registers and land books, the responsibility of the staff, penalties, annulment of titles, delivery of duplicates, copies, extracts and certificates, inspection of registers and land books, and operations preparatory to the formation of the geometrical cadaster. Chapter IX contains provisional measures.

§ 3. AGRICULTURE AND COLONIZATION.

A. -- *Measures in favour of Agriculture.* — Certain and complete data as to agricultural conditions in Libya cannot yet be given. The time which has elapsed since the Italian occupation is too short and the events of the war have often prevented the necessary investigations. There are two reports on the subjects but they confine themselves to some zones and cannot therefore be considered as giving a complete exposition, and moreover they are largely concerned with technical matters. They are the following :

(1) *Relazione del Primo Viaggio della Commissione nominata dall'on. F. Nitti, Ministro di Agricoltura, sub tema Ricerche e Studi Agrológicos sulla Libia.* — I. La Zona di Tripoli (*Report of the First Voyage of the Com-*

mission nominated by the Hon. F. Nitti, Minister of Agriculture, as to Agrological Researches and Studies on Libya. — I. The Zone of Tripoli). Bergamo, Istituto italiano d'arti grafiche, 1912.

(2) Commissione per lo Studio Agrologico della Tripolitania nominata con D. M. dell'11 febbraio 1913. — La Tripolitania Settentrionale (*Commission for the Agrological Study of Tripoli nominated by Ministerial Decree of 11 February 1913 — Northern Tripoli*). Two vols. Rome, Bertero, 1913.

To these two official reports there must be added the results of the mission of Signor Leopoldo Franchetti to Tripoli for the study of the Gebel, published under the title "Società Italiana per lo Studio della Libia. La Missione Franchetti in Tripolitania. Il Gebel" (*Italian Society for the Study of Libya. The Franchetti Mission in Tripoli. The Gebel*). Florence, Milan, Treves, 1914. To this is annexed a second volume prepared by R. Pampaninini on the flora of Tripoli, namely "Plantae Tripolitanae ab auctore anno 1913 lectae et Repertorium Florae Vascularis Tripolitanae", Florence, Pellas, 1914.

In view of our imperfect knowledge of agricultural conditions in Libya we will merely note certain data as to the types of crops now grown in the colony. They are as follows:

(a) *In the irrigated gardens* trees and grasses are grown on a small scale by settlers and their value realized directly. These gardens are generally found in larger or smaller groups - oases - distributed along the coast, and occur very rarely in the interior.

(b) *In the enclosed unirrigated domains* special kinds of trees are usually grown or else olive-trees together with cereals, the winter floods aiding culture in both cases. These domains are usually at the bottom of the basins formed by the hills.

(c) *In the domains for growing trees* olive and fig trees are grown without irrigation, by themselves or together with cereals. They occur especially in the mountain territory, as in Msellata and Garian.

(d) *The badia land*, otherwise the steppes, is used for pasturage and for the limited and occasional cultivation of cereals.

(e) *The uidián* are in special cases used for the almost or quite continuous growth of cereals.

The cultivable land of Libya is as regards its smaller part cultivated by irrigation, effected as economically as possible in order that the water may not uselessly run out to the sea or be lost in systems of irrigation. The larger part of the land is cultivated without irrigation by the aid of the agricultural technique special to arid soils. If there is subterranean fresh water at no great depth it would be possible to extend irrigated agriculture at various points in the colony and thus to bring vast zones of territory under irrigated cultivation. It would also be possible to extend the flooded crops in the depressions of the hill country, and it would be useful to investigate the possible means of using on the plain the water of torrents which now is lost in the sea. On almost all the rest of the agricultural land the trees and grasses of the unirrigated land might be grown profitably if a scientific technique were adopted. On the parts of the steppe not used for agricul-

tural crops stock-farming, and especially sheep-farming, could be improved and rendered markedly more productive than it is at present, care being given above all to watering the animals and preserving them in healthy condition.

Pending more effective action in favour of agriculture some measures were esteemed necessary to lessen the depression affecting agricultural conditions. Among these one was urgent, namely a provision, however rudimentary, of agricultural credit for the natives; for the Ottoman agricultural bank went into liquidation immediately after the Italian occupation and some grants made directly by the colonial authorities did not sufficiently take its place.

The royal decree of 9 March 1913, no. 262 (1) for Tripoli authorized the branch of the *Banco di Sicilia e Tripoli*, supported by the Bank of Italy, and the royal decree of 6 November 1913 for Cyrenaica authorized the branch of the Bank of Italy at Benghazi, to effect operations in agricultural credit so long as these banks employed their own capital with the government's limited security, together with the capital already lent by the colonial administration and capital arising out of the liquidation of the Ottoman agricultural bank, the further management of which was entrusted to these banks (2).

It was also necessary to solve a grave problem arising out of the large extent of land, of the most fertile description, especially near the town of Tripoli, which had been entirely abandoned, either because former possessors were dead or had emigrated, or because the prospect of larger earnings has drawn them to the towns and they had alienated their property in defiance of the prohibition of sales, and the buyers had not considered it wise to show themselves. The ruin of wells and cisterns and the progressive invasion of the sand were to be feared, to say nothing of other losses.

The royal decree of 6 September 1913, no. 1106 (3), did not aim, as some wrongly think, at facilitating Italian colonization, but at bringing owners back to cultivate their lands or, failing this, at bringing other natives, by preference, to take their places, as public interest dictated. This decree allowed concessions for three years of abandoned lands, such concessions to be renewable for the same period if the owner did not meanwhile present himself or if, on presenting himself, he did not pay the concessionary the value of the improvements and repairs made by the latter during his occupancy.

The application of this decree at once gave satisfactory results.

The royal decree of 20 March 1913 provided against the loss which would ensue on an excessive exploitation of the palm-trees for it fully regulated the extraction of *laghbi*; and the royal decree of 11 January 1914 re-

(1) *Gazzetta Ufficiale*, 8 April 1913, no. 82.

(2) This matter was afterwards regulated by the *Norme Provvisoire per la Concessione dei Prestiti Agrari*. (Provisional Rules for the Granting of Agricultural Loans) of 15 October 1915.

(3) *Gazzetta Ufficiale*, 6 October 1913, 232.

gulated the esparto harvest, the purchase in the gross of this product and trade in it.

B. — *Attempts at Colonization and Criteria on which they were based.* — As things are at present little can be said on the subject of colonization. We will merely advance some considerations and reproduce some data of a general character.

The types of domain which may most profitably be chosen for the future colonization of Libya, according to the selection made by the Commission for the Agrological Study of Tripoli, nominated by a ministerial decree of 11 February 1913, are the following :

(a) Exploitation by irrigated crops, if a very intensive system of agriculture leading to the production of plum-trees, fruit, vegetables and various industrial plants, be adopted ;

(b) Exploitation by entirely dry or flooded crops, extending over a very large area, say 200 to 300 hectares, the mixed culture of trees and grasses being practised ;

(c) Pastoral exploitation depending principally on sheep-farming, on the principle of a central domain or nucleus and a greater or less extent of steppe used as pasturage.

In certain circumstances unirrigated, enclosed domains may also be adopted for colonization, but this type of agriculture seems to be the least profitable.

The first experiments in colonization in Libya were made by the Royal Agrarian Office of Tripoli, formed by a royal decree of 2 March 1914, no. 179. To this office duties were entrusted which may be divided into two very distinct groups : the first comprising those of an essentially administrative nature, including investigations and measures tending to favour native and colonial agriculture and to stimulate and encourage colonization by Italian agriculturists; the second those of a technical and economically agricultural nature which concern the whole programme of practical experiment.

In carrying out these first colonizing experiments the principle has been adopted of associating the action of the State with private initiative, in other words the government's action has been completed by that of individuals with a view to avoiding the danger of patchwork colonization inspired by no guiding idea.

By the royal decree of 13 July 1914, no. 726, the governor of Tripoli was empowered to make grants of the lands of the domain. He was in a position to carry out, by means of the staff of the Agrarian Office of Tripoli, an organic and scientific programme of colonization based on the general criteria already established by the central administration.

This measure was otherwise justified by the necessity of leaving to the local government, in the initial period in which all the elements contributing to determine economic conditions in general and the agricultural condition of the colonies in particular were not yet known, that freedom of action which is quite indispensable if colonizing activity is not to be sub-

jected to the influence of prejudice and dominated by restrictions from which grave and irreparable errors may arise.

As regards methods of alienating land it should be remembered that free grants and sales had equally to be excluded, since the former may bring to the colony grantees who have not the means to carry on scientific and intensive colonizing action, as certain incontrovertible data furnished by experience and the history of the chief colonizing nations show, while the latter seems to be equally unsuitable. Even leaving aside the fact that to allow sales may give rise to speculation, there is the probability that purchasers will spend on their purchases the capital which could profitably be used on the improvement of their property. The only remaining alternative was therefore that of an improving contract, which was considered in the case of very extensive lots to be a long lease involving no right of purchase; and in that of small lots to be a long lease of property redeemable in a period of from fifteen to twenty-five years. This form offers, in addition to the advantages always present in an improving contract, the advantage that it allows the action of individuals to be completed by the government, for an obligation is placed on the concessionary to allow the technical staff of the Agrarian Office, who are charged to superintend and control his agricultural activity, to have access to his holding.

When the form of a long lease has thus been chosen for concessions it was thought best to treat individually, this method seeming most advisable among those presenting themselves. It is indeed obvious that during the first year of such very important experiments the method of sales by auction would have incurred the grave risk of bringing to the colony persons most unsuitable to the practice of agriculture, especially since the amount of the annual rent was made as low as possible.

In choosing concessionaries the criteria followed were neither vague nor arbitrary. The applications received were examined with scrupulous care and preference was given to societies of agriculturists or to single agriculturists who seemed to offer the best guarantees of a serious success.

In drawing up the deeds of concession the following principles were adopted :

(1) For concessions of large lots :

The piece of land is ceded to be enjoyed for a determined number of years, fifty or seventy-five, without right of purchase on the part of the concessionary who must pay an annual rent, fixed at a very low rate for the first years, and at a higher rate for subsequent years in which, since he has fulfilled the necessary terms of the contract, he sees his annual income increase.

The concessionary is bound to execute within determined periods, on pain of the revocation of his contract, stipulated works and plantations. He is also obliged to reside in the colony or to cause to reside on the property a technical administrator on manager, placed over it as his special deputy in administrative and judiciary matters. Finally he must allow the technical staff of the Agrarian Office to have access to the property in order to see that the clauses of the contract are exactly executed.

On the other hand the concessionary has the right to exemption from taxes and remission of rent in determined cases, and, other things being equal, should have a preference if new concessions are on any pretext eventually made by the State.

(2) For concessions of small lots :

These lots have an area of from three to thirty hectares and exceptionally of fifty hectares. They are reserved exclusively to small agriculturists who dispose of the capital necessary to bringing them under cultivation. They are ceded for ninety-nine years, with a right of purchase to the concessionary who has scrupulously fulfilled the stipulations of the contract at the end of twenty-five years, or in exceptional cases at the end of fifteen years, the terms to be counted from the day on which possession was taken.

Even in the case of the concession of small lots the concessionary is bound to carry out determined works and plantations, and has the right to special exemptions and remissions of rent.

It is evident that it is the chief aim of these concessions of small lots, to which the Agrarian Office devotes the greatest care, to favour and encourage the agriculture on a small scale which has given excellent results in certain conditions, especially when colonization has been in its first stages.

In the beginning of 1915 concessions were made, as appears from the *Bollettino di Informazioni* of the Ministry of the Colonies (1), of four large lots of land having a total area of 986.50 hectares and thirty-nine small lots, ceded to small agriculturists, having a total area of 548.26 hectares.

But, as has been said already, the colonization of Libya is still only beginning.

(1) 3rd year, no. 1, January 1915. Rome, Bertcro, 1915. .

GREAT BRITAIN.

AGRICULTURE AND THE WAR.

OFFICIAL SOURCES:

THE DEFENCE OF THE REALM REGULATIONS. REGULATION 2 M AS TO LAND IN GREAT BRITAIN NOT CULTIVATED SO AS TO INCREASE FOOD SUPPLY. Amendments in Defence of the Realm Regulations made by Order in Council of March 13th, 1917.

THE CULTIVATION OF LANDS ORDER, (No. 3), 1917, dated March 15, 1917, made by the Board of Agriculture and Fisheries. The above are printed in *Defence of the Realm Manual*, 3rd enlarged edition, H. M. Stationery Office, London, March 1917.

CIRCULAR LETTERS OF THE DIRECTOR GENERAL OF THE FOOD PRODUCTION DEPARTMENT OF THE BOARD OF AGRICULTURE AND FISHERIES to County Agricultural Executive Committees in England and Wales. *The Journal of the Board of Agriculture*, Vol XXIV. No. 3, London, June 1917.

THE WORK OF THE AGRICULTURAL EXECUTIVE COMMITTEES in Bulletin No. 1, Series B, issued by the Food Production Department of the Board of Agriculture and Fisheries.

Some account has already been given of the efforts made by the British government to increase the production of food in the country. We here attempt an analysis of the machinery intended to secure the maximum production of the cultivable lands.

§ I. THE LEGISLATIVE BASIS OF THE ORGANIZATION.

The existing provisions as to the cultivation of lands are based on an amendment, passed on 13 March 1917, of Regulation 2 M of the Defence of the Realm Regulations. This amendment gives certain powers as regards England and Wales to the Board of Agriculture and Fisheries, and as regards Scotland to the Board of Agriculture for Scotland, which bodies exercise their powers "after such consultation with the Food Controller as may be arranged" and where they "are of opinion that, with a view to maintaining the food supply of the country, it is expedient".

They may "enter on and take possession of any land which in their opinion is not being so cultivated as to increase, as far as practicable, the food supply of the country, and, after entry thereon, do all things necessary or desirable for the cultivation of the land or for adapting it for cultivation; and for such purposes enter on and take possession of any buildings on the land or convenient for such purposes". They may "take possession of any machinery, implements of husbandry or plant..., or any farm produce, stock or animals... required for the cultivation of land or the increase of

the food supply of the country ". They may " by notice served on the occupier of any land require him to cultivate the land in accordance with such requirements as the Board may think necessary or desirable... ; and by notice served on the tenant of any land, which or part of which in the opinion of the Board is not being so cultivated as to increase as far as practicable the food supply of the country, determine his tenancy of the land... ; and after entry on any land arrange for its cultivation by any other person whether by contract of tenancy or otherwise. An occupier of land may, with a view to maintaining the food supply of the country, submit to the Board a scheme for the cultivation of the land in a manner not consistent with the contract of tenancy of the land, and the Board, if satisfied that the adoption of the scheme is necessary or desirable for the maintenance of the food supply, may direct that the land shall be cultivated in accordance with the scheme, subject to any modification which the Board may think fit to make therein ". " If the Board at any time withdraw from possession of any land of which possession has been taken under this regulation, they may recover from the person then entitled to resume occupation of the land such amount as represents the value to him of all acts of cultivation or adaptation for cultivation executed by the Board ". " The Board may with respect to any land... authorize any person or any body constituted by the Board to exercise on behalf of the Board any powers of the Board under this regulation and prescribe the procedure of any such body ".

§ 2. THE AGRICULTURAL COMMITTEES IN ENGLAND AND WALES.

a) *The War Agricultural Executive Committees.*

As regards England and Wales this regulation was completed by an order of the Board of Agriculture and Fisheries, made on 15 March 1917, which defined the powers of the War Agricultural Executive Committees who had previously been governed by an order of 20 February 1917. This new " Cultivation of Lands Order " states that " the persons who are for the time being appointed by a county council of an administrative county to act as members of the War Agricultural Committee for the county are hereby constituted as the body to exercise the powers conferred on the Board " by the regulation. " The body hereby constituted shall maintain an executive committee consisting 1) of members appointed by the said body, not less than four nor more than seven in number, unless the Board otherwise direct, and 2) of such additional members as the Board may appoint. In the case of a county in Wales (including Monmouthshire) two of the members so appointed by the body hereby constituted shall be the members representing the council of the county on the Welsh Agricultural Council... An executive committee shall from time to time report their proceedings to the body constituted by this Order for the county, but the acts of the committee shall not be subject to confirmation by that body... Accounts shall be kept by an executive committee of their receipts and expen-

diture and be open to inspection by any officer of the Board, and those accounts shall be made up and audited in such manner as the Board shall direct... An executive committee may, subject to any directions given by the Board, appoint such sub-committees as the committee thinks fit. A sub-committee may consist either wholly or partly of persons not being members of the executive committee". A saving clause provides that the executive committee "shall not enter on or take possession of any common land as defined by this Order, without a further consent given by the Board".

Thus in England and Wales the machinery for the intensification of agricultural production consists in each county of a War Agricultural Committee, the directing body, on which depends a War Agricultural Executive Committee, which leaves certain duties to sub-committees.

b) The District Sub-Committees.

In May 1917 the Director-General of the Food Production Department of the Board made certain suggestions to the Agricultural Executive Committees in England and Wales as to these sub-committees. "As a rule", he stated, "it is desirable that the county Executive Committee should divide the county into convenient districts for the purpose of the increased production of food, which would in most cases correspond with the existing Rural Districts, and should appoint to each district a Sub-committee of not less than four or more than seven members, having experience in agriculture and willing to attend meetings regularly during the war... A district committee should meet at least once a fortnight and if possible once a week... It should keep minutes of its proceedings and forward a report after each meeting to the County Executive Committee and to the Board of Agriculture's commissioner for the district. It should appoint one or more persons, experienced in agriculture as its correspondents and representatives in each parish or convenient group of (usually not more than three) parishes in the district... It should report to the County Executive Committee any land within its district which is from any cause not at present producing its full quota of food for the nation, suggest the action necessary to obtain the best possible output of food from the land, and assist the County Executive Committee in carrying out any measure which it may decide to take with that object... It should report to the County Executive Committee any grass land which in its opinion ought to be ploughed up for the 1918 cropping. It should report any special cases of labour shortage and should see that farmers needing labour are put in touch with any available source of supply... It should co-operate closely with other organizations for the supply of labour, such as the Women's War Agricultural Committee and the Agricultural Representative of the National Service Department. It should assist farmers in obtaining through the County Executive Committee good seed and manures, spraying materials for potatoes and, where necessary, the use of horses and implements. It should do everything in its power to facilitate the working of any motor tractors and steam tackle available in the county, and make known to farmers the terms on which their use can be obtained. It should call the attention of farmers to the facilities for obtaining credit from the

banks through the County Committee under the scheme arranged by the Board. It should help to organize measures for the destruction of rabbits, rats, rooks, sparrows and other pests... It should report any difficulties in maintaining the food supply due to the land being detrimentally affected by the blocking of water-courses or the holding up of water by mill-dams and locks. It should assist the provision of land for allotment where needed, encourage the adoption of co-operative methods for the purchase of seed, manures, etc., and take steps to see that all existing allotments and gardens are fully cultivated... While it must be borne in mind that the County Committee cannot delegate to a Sub-Committee the executive powers conferred on it by the Order, it should endeavour to keep each Sub-Committee fully occupied with work of a responsible character, and thus save itself from becoming overburdened with a mass of detail which can be better dealt with by men of local knowledge".

In many cases the district committees are already doing well and are steadily improving in effectiveness.

c) *The Special Sub-Committees.*

Another circular letter issued by the Director General of the Food Production Department to the War Agricultural Executive Committees, also in May 1917, requested that further sub-committees should be formed in each county to undertake certain duties, in particular a Labour Sub-committee, a Machinery Sub-committee and a Supplies Sub-committee. Each of these sub-committees should consist of "not more than two members of the Executive together with other persons co-opted from outside".

As regards the *Labour Sub-Committees* the circular stated that "in many counties a sub-committee has already been appointed to deal with the distribution of soldier labour, but its functions should be extended to deal with matters relating to the supply, distribution, housing and wages of all forms of labour... In view of the necessity of encouraging the employment of women, and particularly of those women who have been trained under the Board's scheme, the Organizing Secretary of the Women's War Agricultural Committee should be co-opted as a member of the Labour Sub Committee... The Labour Sub-Committee might deal also with the supply and distribution of Army or other horses and with any questions that will arise under the Billeting of Civilians Bill".

"In view", the circular states further "of the new duties entrusted to the committees..., and of the volume of work involved in making arrangements for the ploughing up of the quota of grass land apportioned to each county, it will be essential to appoint a special sub-committee for the purpose. It should be called the *Machinery Sub-Committee* and should deal with the work of the (government) tractors and the sets of steam tackle in the county, and should also be responsible for the organization of all kinds of agricultural machinery, especially threshing machines".

The increased quantity of fertilizers, seeds and other agricultural supplies which will be needed owing to the increased arable area is alleged as the reason for the appointment of a special *Supplies Sub-Committee*. "It

should consist of two members of the Executive Committee together with representatives of the principal dealers, merchants and agricultural co-operative trading societies in the county... The sub-committee should use their influence to ensure that all land in the county is adequately and properly manured, and should undertake any purchases needed for land on which the Executive Committee enter under the Cultivation of Lands Order. The Food Production Department will be prepared to give the sub-committee any advice and assistance in their power as to the supplies, prices, etc. of requirements".

It is suggested finally that "Executive committees may find it desirable to appoint other sub-committees to deal with such matters as finance, the survey (on which the District Value of the Land Valuation Department should be appointed), and other branches of the work".

d) *The Application of the Cultivation of Lands Order by the Agricultural Executive Committees.*

The administration of the Cultivation of Lands Order is the most important and most delicate duty of the County Executive Committees.

It is of course essential that they should obtain accurate and unbiased opinions on which to found their action, and here their difficulties begin. In some cases the district committees are not sufficiently manned by farmers, and considerable time is therefore wasted in dealing with their reports which have to be referred back to a special panel of practical farmers and a valuer. In other cases, where district committees are composed chiefly of farmers, these are not always willing to give information as to the state of the lands of their brother farmers, and are inclined to think nothing important except the facilitating of their task by the provision of labour, machinery and other necessities.

An Executive Committee can in the first place send a mere *recommendation* to a farmer. "In the majority of cases", writes a commissioner, "the farmers agree to carry out the suggestions of the Executives", and most other commissioners report to the same effect. One County Executive sends to the farmer concerned a form which has on its face a polite recommendation and on its back a list of its own summary compulsory reserve powers. The results are said to be satisfactory. When the existing occupier agrees to carry out the recommendations of the Executive, it is necessary to see that his promises are performed. Here especially the District Sub-Committees can be useful.

If a farmer is unable to fulfil the requirements of the Executive it becomes necessary to supplement his efforts or to replace him. This can often be done *by agreement*. The committee can help him by carrying out specified acts of cultivation, or by taking over and transferring to a neighbour some of his land, for instance the arable part of his farm. When a tenant is thoroughly incompetent or refractory his tenancy must be determined summarily. Before invoking the powers of the Board of Agriculture it is often possible to carry through this matter by agreement between owner and tenant under the advice and pressure of the committee. A satisfactory

tenant may then be installed, the owner may undertake to farm the land himself, or the committee may, in the last resort, undertake its cultivation.

When all else fails it becomes necessary to use *compulsory powers*. The Executive Committee can direct a farmer to carry out an improved system of cultivation under penalties for disobedience; can enter on his land and carry out on it specific work, such as ploughing or manuring, recovering the cost from him; can transfer part of his land to a neighbour or other substitute; or, finally, can ask the Board summarily to end his tenancy replacing him by someone more efficient or farming the land themselves. In cases of such eviction it is sometimes possible to prevent hardship by leaving the old tenant in possession of the farmhouse for a time.

Reports show that the Executive Committees are taking action in all these ways. Advice and persuasion are being used in numberless cases and where these fail most committees have no hesitation in applying some of their more drastic powers.

Even when landowners are not themselves farming any land committees have sometimes been able to put pressure through them on unsatisfactory tenants. In many cases improvement on badly cultivated lands has been secured by the help of the landowner or his agent.

§ 3. THE ORGANIZATION IN SCOTLAND.

No order corresponding to the Cultivation of Lands Order has been made by the Board of Agriculture for Scotland. But *District Agricultural Executive Committees* have been formed for most of the Scottish counties, and the Board exercise their powers under Regulation 2 M as amended in March 1917, which we have already cited, through these committees who have Executive Officers. Certain of the more remote districts are worked *by the Board directly*.

Where, in the opinion of a committee, the occupier is using his lands for the production of crops at present unprofitable from a national point of view, or is cultivating his land inadequately, and where their representations have proved ineffectual, the committee recommend the Board to exercise their powers under the amended regulation.

Failure to cultivate the land in accordance with a direction of the Board constitutes a summary offence against the Defence of the Realm Regulations.

Schemes which override restrictive clauses of leases under the amended regulation must be submitted in the first instance to the local committee. The committee discover whether the tenant submitting such a scheme has sought and failed to obtain its approval by his landlord. If they are satisfied that the scheme will lead to increased production of food they endeavour, by negotiation, to secure the landlord's consent to its adoption. If such negotiation fail they report the matter to the Board, who may subsequently issue a direction that the land in question be cultivated in such specified manner as they think proper. Any question as to payments by the State to the landlord for loss thus occasioned will be referred, in default of agreement, to the Defence of the Realm (Losses) Commission.

NOTICES RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

AUSTRIA.

1. WITTSCHIEBEN (Dr. Otto) : Die Bauernlegungen in Steiermark 1903-1912. — Die Zwangsversteigerungen land- und forstwirtschaftlicher Grundstücke in Steiermark 1903-1912. (*The Transformation of Peasants' Holdings in Styria 1903-1912. The Sales by Auction of Agricultural and Forest Land in Styria*), prepared by Dr. Otto Wittschieben, director of the Provincial Office of Statistics at this office. — Graz, Lensehner and Lubensky, 1916.

This publication is divided into two parts, of which the first is concerned with the formation of large properties by aggregating rural holdings, and the second with the forced auction of agricultural and forest holdings in Styria between 1903-1912.

The word *Bauernlegungen* which is included in the title of the first part, needs explanation. It is used in its wide sense to signify the passage of a holding hitherto entirely cultivated by peasants into the tenure of persons of a different social position who will cultivate it on new principles and for a new object. In its restricted sense this word is applied to the sale of rural holdings for the purpose of forming or extending hunting reserves and forest zones.

The author examines the losses occasioned to these holdings by such changes of their ownership, method of cultivation and purpose ; and the interest which the State has in their continued tenure by a rural population as numerous as possible. He enumerates the legislative measures anterior and posterior to the outbreak of war which aim at preventing the aggravation of this evil. Of such legislative measures the most important are : the imperial ordinance of 9 August 1915 (Bulletin of the Laws of the Empire, No. 234), which regulates the alienation of rural and forest property ; the ordinance of 11 August 1915 (*ibid.* no. 235) which contains rules for applying the preceding ordinance ; and the ordinance of the Ministry of Justice of the same date (*ibid.* 236) which enumerates the communes in which the said ordinance is not applicable.

2. STRAKORCH (Dr. Siegfried H. C.) : Die Grundlagen der Agrarwirtschaft in Oesterreich. Eine Handels- und Produktionspolitische Untersuchung (*The Foundations of Agrarian Economy in Austria. A Study of the Policy of Trade and Production*). 440 pp. Vienna, Tempsky, 1916.

The first part of this book is devoted to the rural economy of the various districts of Austria, examined from points of view as divergent as that

of the nature of the soil and that of zootechnolgy. It is divided into six chapters which treat separately of the different agricultural districts, and thus it gives a complete and reliable picture of rural-economic conditions in the country.

In the second part the author studies the agrarian problems of Austria in the light of political factors, such as the constitutional rules in force, the population, means of communication and industry; and he shows the importance of these and the influence they have on the development of agriculture.

The third part is concerned with customs' rights and their effect on the rural economy of the country.

In the fourth and last part the author is occupied by the results of the Austrian agrarian policy and the problems of agriculture after the war.

SWITZERLAND.

PUBLICATIONS OF THE SECRETARIAT OF SWISS PEASANTS, No. 54. *La Question Ouvrière Agricole en Suisse* (The Question of Agricultural Labour in Switzerland). — Part IV: Proposals for the Solution of the Problem (conclusion). The Reduction of the Need for Agricultural Labour. Brougg. Secretariat of Swiss Peasants. 194 pp., 1917.

This is the fourth part of the study on agricultural labour in Switzerland and should have appeared in 1913. Obstacles caused the publication to be delayed.

The subject is the measures fitted to reduce the need for agricultural labour. Those dependent on the general organization of the land are dealt with first, then those dependent on the interior organization of farming, and finally those dependent on the direction of farming. The measures dependent on the interior organization of farming regard the substitution of machinery for human labour, the employment of labour saving implements and machinery, and modes of utilizing the soil which economize labour.

UNITED STATES

1. SYSTEMS OF RENTING TRUCK FARMS IN SOUTHWESTERN NEW JERSEY, H. A. TURNER (U. S. Dept. Agr. Bul 411 (1916) (pp. 20).

The farms from which records were secured were in Gloucester, Salem, and Cumberland counties. The farms were subdivided into early and late truck farms and also classified according to methods of renting. Among the more general conclusions brought out by this study was the fact that the average labour income of 186 farms, let for a half share of the crops, was \$223 for the tenant and 6.8 per cent on the landlord's investment. The average for 35 farms let for cash was \$206 for

the tenant and 3.7 per cent on the landlord's investment. The bulletin discusses in detail incomes and the system of farming as carried on by the farmers under the various classifications noted above.

* * *

2. **MARKETING PERISHABLE FARM PRODUCTS**, A. B. ADAMS (*Columbia Univ. Studies Polit. Sci.*, 72 (1916), No. 3, pp. 180).

The author has attempted to point out the fundamental forces which underlie the marketing of fruit, vegetables, and dairy and poultry products, and to suggest methods of controlling these forces so that the cost of marketing may be reduced.

He claims that the social burdens incident to the marketing of perishable goods are due to two main causes — to the inherent characteristics of the goods themselves and to the imperfections in the methods and processes by which they are marketed. Because of the natural perishability of the goods many of them become unfit for consumption before they can be offered to consumers. The natural seasonal production of the goods creates temporary surpluses in the available physical supply, and this adds greatly to the decay of the goods by lengthening the average time between their harvest and consumption. The burden of marketing them is further increased because they must be produced by a small business unit (the farm) and consumed by a smaller one (the family).

He further states that "if we are to reduce the social costs of marketing perishables through a reform in the system of marketing it must be done by finding cheaper and more efficient ways of performing the complicated processes, not by reducing the number of those processes."

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXXI.
8TH YEAR: NUMBER 9
SEPTEMBER, 1917.



ROME
PRINTING OFFICE OF THE INSTITUTE
1917

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Part I: Co-operation and Association

HOLLAND.

DUTCH MARKET-GARDENING AND ITS ORGANIZATION.

by H. M. R. LEOPOLD.

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OTHER SOURCE :

VAN MARREWIJ (G. J.) (Secretary-treasurer of the "Public Sale of Vegetables" at Loosduinen). *De Loosduinsche Groetenveiling. Haar, oprichting, geschiedenis, werking en nitkomsten* " (*The Public Sale of Vegetables at Loosduinen: its Foundation, History, Action and Results*) 8 illustrations. Naaldwijk, R. van Bergen & Co., 1913.

All the conditions which favour intensive horticulture are united in Holland. The climate is temperate and very damp ; the land marshy and lying almost wholly below the level of the North Sea. Throughout the year there is need for the soil to discharge artificially its surplus of water, and this allows the crops to be kept fresh on the peaty marshes which are naturally very fertile even during long droughts. The innumerable water courses which cross the country in every direction, and in several districts surround each vegetable garden with a navigable canal, enormously facilitate the transport of manures and other material as well as produce.

For several centuries the Dutch have drawn profit from these natural advantages and have specialized in market-gardening. Some historical facts prove this. In 1516 the Danish King, Christian II, invited the inhabitants of the Waterland near Amsterdam to colonize the island of Amager

near Copenhagen, which thereafter became the vegetable garden of the latter town. Hume tells in his history of England that Queen Katherine of Aragon caused a special messenger to bring Dutch salad to England for the royal table. In the sixteenth century Dutch emigrants introduced horticulture to Norwich and the island of Guernsey.

Materials for a detailed history of horticulture in Holland are lacking, but a little book by Mr. Philipp Andreas Nemnich, "Original Beiträge zur eigentlichen Kenntniss von Holland", informs us that as early as 1809 the country specialized in this industry to an advanced degree and exported dried vegetables in considerable quantities. But until 1830 progress was insignificant because Holland suffered from a general depression. It was only after the separation from Belgium that the period began of continuously increasing prosperity by which growers of vegetables, fruit-trees and ornamental plants profited. The deductions to be made from statistics are clear: whereas in 1833 the whole area of market-gardens was 45,884 hectares (1); private gardens, land otherwise grown with vegetables, flowers and bulbs, and orchards and nurseries extended in 1912 over 89,941 hectares (2).

Although from these figures it may be deduced that 2.4 per cent. of the cultivated land was given up in 1912 to commercial production they do not give an idea of the intensity of cultivation. This can be estimated if it be noted that in 1912 the total extent of frames in which vegetables were grown was nearly 477 hectares, that of cucumber and tomato houses more than 430 hectares, that of houses containing frames about 64 hectares, that of vineries 67 hectares, and that of peach-houses 15 hectares. Flowers were grown in frames extending over 20 hectares and houses extending over 34 hectares, while nursery frames and houses covered respectively 4 and 1.7 hectares.

As regards yield this can be deduced from the facts as to the division of property. Three fourths of the horticulturists, almost all of whom have been able to build themselves pretty country houses, have less than three hectares of land each: 13.9 per cent. have from 0.05 to 0.50 hectare; 16.6 per cent. have from 0.50 to 1 hectare; 30.6 per cent. have from 1 to 2 hectares; 16.7 per cent. from 2 to 3 hectares; 13.5 per cent. from 3 to 5 hectares; 6.6 per cent. from 5 to 10 hectares; and 2.1 per cent. more than 10 hectares. The census of occupations taken in 1909 showed that there were 15,488 horticulturist employers of labour and 29,760 workpeople.

Figures as to the total yield and its value would be interesting, but statistics on this point are unfortunately lacking. The economic importance of vegetable and flower-growing can however be estimated from the following figures as to Dutch exportation in 1912.

(1) 1 hectare = 2.5 acres.

(2) The last statistics (1915) give the extent of commercial vegetable gardens as 18,652 hectares, that of private gardens as 32,467, that of orchards as 23,677, that of nurseries as 2,673 that of flower gardens as 538 and that of bulb gardens as 5,319 hectares, giving a total of 83,326 hectares. The decrease in area is doubtless due to the war.

Produce	1912 Expor- tation in 1000 kg (1)	1912 Value in 1000 florins (2)	1912 Destination (principal customers) in 1000 kg	1913
<i>Fresh Fruits:</i>				
apples	23,000	1,621	Germany 21,000 Belgium 1,376 Great Britain 528 Norway 29	61,837 1,700 4,415 10
pears	10,000	588	Germany 8,700 Great Britain 1,000 Belgium 75	12,870 3,796 189
table grapes	259	117	Germany 146 Great Britain 107	1,589 261
cherries	3,100	248	Germany 2,409 Great Britain 700	2,458 1,104
gooseberries	3,000	302	Germany 2,800 Great Britain 200	2,960 232
black currants	660	79	Great Britain 570 Germany 90	1,049 41
white and red currants	1,000	106	Great Britain 600 Germany 400	1,162 1,796
strawberries	3,800	575	Germany 3,700	6,915
<i>Fresh vegetables:</i>				
cabbages	32,000	476	Germany 27,000 Belgium 3,000 Great Britain 2,000	50,788 15,026 1,373
cauliflowers	17,000	337	Germany 15,000 Great Britain 1,000 Belgium 700	15,638 1,181 52
onions	41,000	1,017	Great Britain 25,000 Germany 10,000 Belgium 4,500	11,381 62,442 3,909
cucumbers	47,000	1,420	Germany 43,000 Great Britain 4,000	52,516 3,883
other fresh vegetables	73,000	3,600	Germany 51,000 Belgium 12,000 Great Britain 9,000	106,281 6,346 8,444
<i>Dry vegetables</i>	480	411	Germany 295 Belgium 112	— —
<i>Vegetables preserved in salt or vinegar</i>	6,250	4,186	Great Britain 4,800 America 600 Germany 400	— — —
<i>Vegetables preserved in boxes</i>	3,500	1,214	Dutch East Indies 2,600 Great Britain 400 Belgium 125	— — —

(1) 1 kilogramme = 2.2 lbs. (2) 1 florin = 1.66s at par. (3) The statistics of 1913 lump fresh and dry vegetables.

Produce	1912	1912	1912	1915
	Exportation in 1000 kg	Value in 1000 florins	Destination (principal customers) in *1000 kg	
<i>Living Plants:</i>				and dry
trees and shrubs	12,500	3,200	Germany	6,500 4,223
			America	3,000 8,880
			Great Britain	1,200 2,185
			Russia	700 —
			Belgium	300 33
flowers, leaves, branches	1,140	1,712	Germany	950 1,104
			Great Britain	86 104
			Belgium	40 12
			Sweden	22 37
			Norway	20 34
other plants (cuttings and grafts)	1,700	500	Germany	870 254
			Belgium	770 33
			Great Britain	7,400 7,980
Flowering bulbs	23,000	13,650	Germany	5,100 5,374
			America	3,800 8,101
			Belgium	2,000 — 76
			Sweden	1,300 2,452
			Russia	900 572
Flower and vegetable seeds	2,000	1,030	America	200 —
			Germany	760 —
			Belgium	176 —
			Great Britain	140 —

From these figures it might be deduced that the total value of the export of Dutch horticulture is about 73,000,000 francs, but it should be remembered that this does not include new potatoes and that the larger share of the onions is produced not by horticulturists but by the peasants. To estimate the production the consumption of the six million Dutch people, who are accustomed to eat large quantities of vegetables, must also be borne in mind.

I have given the figures for 1915 as they stand in the last of the sources indicated, but I must warn my readers that they are very abnormal, especially because several buyers have disappeared from the market and exportation has been distributed among the others.

Probably Dutch horticulture was highly specialized at its very origin. The specialization subsists and has the advantage that it produces everywhere generations of good workmen and well informed employers. It has moreover facilitated the birth and development of the organization which is the pride of the market-gardeners, and has made them well-to-do and so powerful that in the present very difficult circumstances they have

been able to save their industry not only from bankruptcy but also from subjection to the State.

Rarely has such strong co-operation developed in so short a time. The market-gardeners came to understand the usefulness of association only after 1880. Towards the middle of the nineteenth century their trade was still so despised that no one in a good position would allow his son to study and practise horticulture. The market gardeners — it is Mr. Marrewijk who thus describes the position of his colleagues in the village of Loosduinen thirty years ago — lived in discoloured and dilapidated cottages and depended exclusively on the local market at the Høgue, where in the mornings they sent their wives and children to hawk a small quantity of vegetables from house to house, to haggle over prices with the servants or housewives who often delayed their purchases until the afternoon in order to buy more cheaply what remained of this merchandise, so subject to deterioration that it could not be carried away. Competition among producers was very severe and would have ruined them all if the nascent export trade in potatoes, especially with Great Britain, had not brought them in a little money and caused the price of vegetables, which were rendered a little less plentiful, to rise. Although the British soon began to grow their own potatoes the relations which had been established were not broken: the inhabitants of Loosduinen began to grow green cucumbers for their customers overseas, and Germany took its place beside Great Britain as a good purchaser of produce. The position was not however satisfactory because competition was unmodified, and the market-gardeners were their own enemies until they recognized that only organization could save them.

This much developed organization — in 1913 there were in Holland 294 associations of horticulturists of which 109 belonged to a "central council" the "Nederlandsche Tuinbouwraad" — has not only important means of propaganda — State-aided schools, frequent exhibitions, a considerable number of periodicals — but also a particular institution, the *sales*.

The "sales" brought about a revolution first in the vegetable and then in the fruit trade, for they were enormously favourable to the development and specialization of cultivation. The first sales association was founded at Broek op Langendijk, a centre for cabbage growing in North Holland; but until 1897 there were only fifteen of these modern institutions although; now their number far surpasses a hundred. All the important producing districts now have one or more of these "sales". Instead of awaiting patiently the visit of a wholesale buyer and selling him produce at a price fixed rather by the buyer than the producer, or transporting produce by boat or cart to the town and spending the best hours of the day in bargaining with customers, a market gardener who is the associate of a "sale" causes his goods to be carried to a central point where numerous wholesale buyers bid for them at the highest prices. The grower is almost certain of securing the maximum price without leaving his garden.

The frauds which used to be very frequent and injurious to the reputation of Dutch produce on foreign markets are energetically combatted by

the "sales". Cultivation is more and more specialized to meet the demands of the export trade which asks for large quantities of one kind of produce.

Some figures as to the "sale" of Loosduinen may give an idea of the evolution of these institutions, which are provided with entirely modern technical plant and conduct sales by a method which avoids all possibility of controversy.

This "sale" was founded on 10 April 1900. Its first season saw 164 sales, involving 213,226 florins' worth of vegetables and 25,191.55 florins for market rights, or 238,417.55 florins in all. In 1901 an increased number of members brought hardly any increase otherwise: the value of the vegetables was 239,539.01 florins, minus 29,618 florins for those withdrawn, and market rights amounted to 29,618 florins, giving a total of 274,850.76 florins. The decision was then taken to oblige the members to take part in the sale and forbid them to do business themselves with individuals. All did not obey this behest; but 1902 by 182 sales yielded 408,682.4 + 2,647.48 + 44,408.44 florins = 455,738.33 florins. In 1903 the bad weather caused a slight fall, but 1904 was a good year which gave a total of 563,056.83 florins. The installation of heated houses caused the total to rise in 1905 to 705,294.84 florins and in 1906 to 836,654.11 florins. In 1907 a new site for sales was established and the result was that sales brought in 1,054,227.98 florins. The increase in 1908 to 1,064,671.65 florins was slight because harvests were good everywhere, the institution of sales was popularized, and competition was therefore strengthened. The number of buyers was moreover less and the market consequently narrowed. The directors of the sale therefore began to contemplate a general association of all the sales and a large foreign propaganda. The following years — 1909 to 1912 — showed only the slightest progress, and this, according to Mr. Marrewijk, indicates a glut of the Dutch market and the absolute necessity of entering into relations with foreign consumers.

Energetic growers would certainly have found the road to bring them slowly but surely to the goal of their organization if the extraordinary circumstances of the European war had not precipitated events. Direct relations with all consumers beyond the sea and the eastern and southern frontiers were created by the governments themselves; a union of all the "sales" has been fully formed. The return of normal conditions will find Dutch market-gardeners more united and stronger than ever, and largely, with the exception of growers of flowers and ornamental plants, much richer than they used to be.

RUSSIA.

THE EGG TRADE AND CO-OPERATION IN RUSSIA.

SOURCES :

MARADUDIN: Къ вопросу о сбыты яицъ (*The Question of the Sale of Eggs*), in «Вѣстникъ Мелкаго Кредита» (*The Messenger of Small Credit*), No 19. Petrograd, 1912.

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КУЛУНУ: Практическіе шаги по осуществленію кооперативнаго сбыта яицъ (*The Practical Results of the Work for the Co-operative Trade in Eggs*) in «Вѣстникъ Мелкаго Кредита», No 15, Petrograd, 1914.

Подготовка кооперативнаго сбыта яицъ (*Preparation for the Co-operative Sale of Eggs*) in «Кооперативная Жизнь» (*Co-operative Life*) Nos. 5, 6 and 7, Moscow, 1914.

G. J.: The Egg Trade and Co-operation in "The Russian Co-operator" No. 2, London, 1917.

The egg trade occupies an important place on the international market, and one of the leading places in this trade, among countries exporting eggs, belongs to Russia. Great Britain annually receives enormous quantities of eggs from abroad, and is therefore first in importance among the importing countries.

Russia's exportation of eggs began comparatively recently. In 1883 she exported only 128,329,000 eggs. In 1904 such number had risen to 954,000,000 and in 1914 to 3,395,859,000 eggs. The quantity she exported increased by 65 per cent. between 1902 and 1912.

Until 1906 she sent her eggs especially to Germany, the country which then was the chief importer of eggs. But since 1907 Germany has in this respect been superseded by Great Britain.

If we examine the data regarding this exportation we see that in 1909 out of a total number of 2,844,737,000 exported eggs 1,051,468,000 or 36.9 per cent. were sent to Great Britain; 794,987,000 or 27.9 per cent. to Germany; 697,635,000 or 24.6 per cent. to Austria-Hungary; 115,257,000 or 4.1 per cent. to Holland; and 185,390,000 or 6.5 per cent. to other countries, including Belgium, Denmark, France, Switzerland and Finland.

Russia lost her first place in the German egg market owing to the opening of an economic struggle with Austria-Hungary, and regained it only in 1913.

Before the war Russia was supplying two of the largest egg markets in Europe, the British and the German, and was also sending eggs to France, Austria, Hungary, Belgium, Denmark and Holland.

Although these latter countries themselves export eggs they also import them for home consumption. This is because their own eggs fetch higher prices in the market than the Russian eggs, which therefore they consume while they sell abroad those they produce.

The following table gives an exact idea of Russia's export trade in eggs in the twelve years from 1901 to 1912.

TABLE I. — *Eggs exported by Russia to the Chief Countries of Europe from 1901 to 1913.*

Year	Austria	Belgium	Great Britain	Germany	Holland	Denmark	Total
In thousands of eggs.							
1901 . .	447,933	53,655	520,506	808,583	56,525	30,973	1,996,977
1902 . .	544,699	80,649	607,430	863,185	27,981	33,527	2,228,948
1903 . .	594,441	83,468	811,009	1,052,999	51,349	46,386	2,775,051
1904 . .	605,357	92,606	854,835	990,984	49,930	58,804	2,752,702
1905 . .	730,607	101,288	940,437	1,005,285	60,019	75,264	2,993,552
1906 . .	674,765	71,738	873,015	978,644	87,466	56,847	2,883,171
1907 . .	541,914	48,217	867,481	850,083	60,239	44,831	2,607,625
1908 . .	704,110	61,375	894,319	745,381	76,366	24,642	2,588,518
1909 . .	697,635	83,189	1,051,468	894,987	115,257	36,348	2,844,737
1910 . .	667,307	96,787	1,086,336	866,081	174,026	35,884	2,998,164
1911 . .	793,228	113,446	1,308,181	1,118,772	192,818	78,259	3,682,049
1912 . .	868,655	90,775	1,138,241	1,000,783	174,213	43,331	3,395,859

As appears from this table the egg trade is a large source of income to Russia. The figures regarding exportation to Holland and Denmark show however that this income might be much larger if the conditions of poultry-farming were better organized and if more care were devoted to the trade.

The prices paid abroad of recent years for Russian eggs have varied from 20.42 roubles (1) to 23.43 roubles for a thousand. Great Britain has provided the best market, paying from 23.42 roubles to 23.43 roubles a thousand.

If we compare these prices with those paid in Great Britain to Danish merchants we find that while the best Russian eggs fetched 23 roubles a thousand, inferior Danish eggs fetched at the same time the equivalent of

(1) 1 rouble = about 2s 1 $\frac{1}{4}$ d. at par.

40 roubles a thousand. A comparison with the prices of French eggs gives similar results : in 1909 Russian eggs cost 31 roubles and French eggs 40 roubles a thousand.

Poultry-farming is treated in Russia as a separate branch of the management of a farm only in rare and exceptional cases.

The great mass of exported eggs are small. Most of the Russian farmers who go in for poultry are small peasant landowners who usually possess only some dozens of hens, pay little attention to them and allow them to breed as chance dictates. Therefore both Russian hens and Russian eggs are small.

The Russian peasant neither selects fowls for his poultry-yard nor takes care of his eggs. The eggs are long on the road and their freshness suffers. Moreover the methods of trading in eggs are defective. It is impossible to secure that the Russian dealers despatch them as promptly nor that the railways transport them as rapidly as is required. There is no organization adapted to this kind of trade, of which the material belongs, to the category of perishable merchandise.

Only recently, after years of this export trade, attention has been directed to it. There has been a desire to provide for the collection, classification and packing of eggs. Refrigerators have been constructed with important results.

Russian eggs now arrive in better condition. Their price has risen since 1912, and it is to be hoped that the Russian peasant will, as a report of the Popular Bank of Moscow states, develop his poultry-farming with the help of co-operative societies and himself become busy over the egg trade. Until recently all this trade was in the hands of small middlemen, who collected the eggs in the villages and gave for them such low prices that the producers are estimated to have lost as much as 27,000,000 roubles a year.

The immense area of Russia, the great distance at which she is situated from foreign markets, the lack of organized centres which would bring the small farmer into direct relation with the foreign market — all these are obstacles to the solution of the problem. The zemstvos and the exporting department have worked hard to create a co-operative trade in eggs. Numerous and interesting attempts in this direction might be cited. Then the Popular Bank of Moscow intervened, its director making a series of interesting investigations in the matter.

Unfortunately all this work did not lead to the formation of a single co-operative society for trading in eggs, and it was found equally impossible to form an agency which could act as middleman between the societies and the market to be supplied.

Occasionally but without method a series of societies was formed, but these could not trade on a large scale so as really to secure profits.

The first steps towards building up this co-operative trade on a large scale were taken before the war, in 1914, by the Popular Bank of Moscow which was willing to undertake the management of a central organization.

With this object this bank concluded on 22 June 1914 a special agree-

ment with the *Union* stock company of London which was founded to trade in eggs.

In accordance with this agreement work is planned to be executed in common as follows :

1) The *Union* is the sole representative of the Popular Bank of Moscow on foreign egg markets. The *Union* was formed with the support of the *Union of Siberian Dairies* and trades in butter, poultry and eggs. It has already a large body of customers ready to buy Russian eggs. It conducts all its trade on commission exclusively. The representative of the Popular Bank of Moscow has the right to control its activity.

2) The Popular Bank of Moscow is the sole representative of the *Union* in Russia where the trade in eggs is concerned.

3) The Popular Bank supplies credit to co-operative societies and grants advances on merchandise sent abroad.

4) The Popular Bank is a centre for all the enterprise as to the foreign trade.

5) The bank is only the commission agent of the co-operative societies, who thus support the total risks of transactions.

At the same time there has been some initiative in the direction of forming co-operative unions for trading in eggs.

The first organization of this kind was formed in the province of Pensa in which three co-operative societies united, the first of them having 54 members of whom 45 were purchasers, while the two others were made up of peasants busy over the development of poultry farming. The first society was to be a centre for the work to be accomplished and its installation was fitted to this purpose. Each society also had an establishment for the sorting and packing of the eggs and was responsible for their quality.

The peasants' co-operative societies were to collect eggs from their members and classify them. When they had received a sufficient number to form a waggon-load this was to be sent immediately by the *Union of Siberian Dairies* to be sold on the market by a wholesale merchant, who was obliged periodically to supply the bulletin of the market prices of the various kinds of eggs.

On eggs collected outside the co-operative society 90 per cent. of the market price was advanced, but as much as 100 per cent. was advanced on members' eggs.

In fact the endeavour was to form an organization connecting buyers and producers, who should do business on an equality.

But this enterprise did not develop largely and did not meet with all the success expected for it.

A second enterprise was set on foot in the district of Eletjk in the province of Orel where an organization of the Danish type was formed, the union of the artels for selling eggs.

The scheme remained almost a dead letter. The Russian woman was still too much of a stranger to this form of co-operation ; the society had few members and could not struggle with the large dealers who disposed of capital.

Now that the prices of agricultural products have risen to giddy heights new efforts have been made to attain to the organization of the co-operative sale of eggs.

The department of agricultural economy has drawn up model by-laws for a co-operative society for the sale of eggs.

According to these such a co-operative society organizes itself to sell in the best conditions its members' eggs. It can organize for depositories, warehouses and refrigerating plant.* Every farmer who keeps poultry may join the society so long as he does not himself undertake the sale of eggs. No member may sell eggs outside the society to which he must deliver all the eggs his poultry supply. To this rule the by-laws make only one exception in favour of the sale of valuable sittings of a breed not common in the district in which the co-operative society works. Such sale needs however the special authorization of the society. Every member of the society has his mark which must be placed on his eggs. The liability of members is limited. They are liable in their possessions but in the measure determined by the by-laws. The minimum membership of a society is eight.

These co-operative societies enter into direct relations with the Popular Bank of Moscow. In despatching merchandise as the bank indicates they should inform the bank as to current market prices. After the sale the Union and the Popular Bank send to a co-operative society a detailed account together with the sum produced by the sale, the amount advanced to the society having been deducted.

This organization gives promise of a large development which will bring it, after the war, the success attained by the similar co-operative organizations for the sale of butter, flax and tobacco.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH INDIA.

THE ACTIVITY OF THE CO-OPERATIVE SOCIETIES IN 1915-1916. — Report on the Working of the Co-operative Societies in Assam for the Year ending on the 31st of March 1916. — Assam Secretariat Printing Office, Shillong, 1916.

The comparative general situations of co-operative societies in Assam on 31 March 1916 and 1915 appears from the following table:

	Central Banks	Unions	Agricultural Societies	Non- agricultural Societies	Total
<i>Societies :</i>					
1914-1915	7	3	271	20	301
1915-1916	10	2	285	18	315
<i>Members :</i>					
1914-1915	449	54	13,698	1,821	16,022
1915-1916	503	48	15,792	1,638	17,981
<i>Working capital :</i>	Rs.	Rs.	Rs.	Rs.	Rs.
1914-1915	1,96,427	2,769	3,47,241	2,61,078	8,07,515
1915-1916	3,29,275	. . . .	3,95,185	1,71,777	8,96,237

All the agricultural societies had limited liability. All the societies with few exceptions showed a profit on the year's working, but their progress was seriously checked by the floods and the indifferent crops.

Central Banks. — These banks have been grouped anew and therefore the figures they submit for 1915-1916 cannot be compared with those of the previous year. The paid-up share capital of the banks now classed as central was Rs. 49,755 (1) in 1915-1916. Their profits amounted to Rs. 12,554. These banks issued loans to agricultural societies at rates of interest varying from 7 ½ per cent. to 12 ½ per cent. per annum. The total amount thus issued during the year was Rs. 44,145 as against Rs. 57,045 in the previous year. It is the exception to find that loans are repaid within the period fixed.

(1) 1 rupee = 15. 4d.

Supervising Unions. — The number of supervising unions did not alter during the year under review. Two of them did useful work; the third had been classed as a central bank.

Agricultural Societies. — Altogether twenty-seven new agricultural societies were registered in 1915-1916. Members' deposits rose from Rs. 79,962 to Rs. 83,794, the rate of interest on deposits remaining $6\frac{1}{4}$ per cent. as in the preceding year. Loans to the value of Rs. 1,46,801 were issued to members, the average loan being Rs. 9-4. The rate of interest on loans varied from $12\frac{1}{2}$ per cent. to $18\frac{3}{4}$ per cent. per annum. The majority of loans were made for a period of more than a year.

All the profits of agricultural societies, amounting to Rs. 22,935, were carried to the reserve funds.

Non-Agricultural Societies. — No non-agricultural society was registered in 1915-1916. One society of this kind was transferred to the class of central banks: and in consequence the total capital, including reserve funds, decreased from Rs. 2,58,307 to Rs. 1,74,077, the deposits of members from Rs. 97,982 to Rs. 60,671, those of non-members from Rs. 73,573 to Rs. 43,486, and the amount of loans outstanding with other societies from Rs. 72,358 to Rs. 30,093. The rate of interest on deposits was the same as in 1914-1915, namely 4 to $4\frac{1}{2}$ per cent. on current deposits and 5 to 9 per cent. on fixed deposits.

The total net profits of the non-agricultural societies amounted to Rs. 7,622, and they declared dividends varying from $6\frac{1}{4}$ to $12\frac{1}{2}$ per cent. On the whole all of them had a very satisfactory year.

Reserve Funds. — Partly owing to the transference of one non-agricultural society to the class of the central banks the reserve funds of the latter increased largely, from Rs. 7,348 to Rs. 14,019, while those of the non-agricultural societies fell from Rs. 15,706 to Rs. 14,496. The reserve funds of the agricultural societies made a substantial advance from Rs. 49,529 to Rs. 63,255.

In spite of the continuance of the war and the prevalence of distress in most parts of the country very little difficulty was experienced in financing rural societies during the year under review. No government loan was issued to central or non-agricultural banks. Loans from central banks and non-agricultural societies increased from Rs. 1,74,833 to Rs. 2,10,376. Deposits of individuals in central banks and non-agricultural societies increased from Rs. 3,29,081 to Rs. 3,58,592. Deposits from individuals — members and non-members — in agricultural societies increased from Rs. 95,434 to Rs. 99,299.

CANADA.

1. CO-OPERATIVE TRADING IN SASKATCHEWAN. — *The Public Service Monthly*, published by the Department of Agriculture, Saskatchewan, Vol. V, No. 11, p. 209, Regina, June 1917.

The details in the following table show clearly and concisely the satisfactory development of the co-operative movement in Saskatchewan, from

year to year and ever since its inauguration. More than 350 co-operative trading associations have been registered under the Agricultural Co-operative Associations' Act of Saskatchewan since it was passed, that is since December 1913. This implies that on an average two associations a week have been organized during the last three years — a remarkable record. It is interesting to notice that the great majority of the associations do a most satisfactory business.

	1914	1915	1916
Associations which supplied a report	102	173	309
Number of shareholders	2,850	5,537	9,444
Paid-up capital	\$ 13,494.20	\$ 39,421.49	\$ 92,940.27
Assets	\$ 37,337.53	\$ 105,322.37	\$ 295,012.40
Liabilities including paid-up capital	\$ 29,717.33	\$ 82,956.57	\$ 232,938.51
Number of associations handling supplies	70	138	308
Value of supplies handled	\$ 239,320.42	\$ 805,456.88	\$ 1,784,545.83
Number of associations marketing live stock	9	10	33
Number of cars handled	30	\$ 140	\$ 241
Value of live stock handled	\$ 42,034.22	150,512.76	\$ 323,171.25
Value of other farm produce handled	No report	\$ 8,923.03	\$ 15,115.56
Total turnover	\$ 281,354.64	\$ 964,892.67	\$ 2,122,832.90
Net profits	No report	\$ 19,102.27	\$ 54,076.52

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2. CO-OPERATIVE STOCK MARKETING IN ALBERTA. — *The Grain Growers' Guide*. Winnipeg, 11 July 1917.

In the spring of 1917 the Manville district association of the United Farmers of Alberta decided, owing to the very unsatisfactory prices locally received for live stock, to form a marketing association. Each local union appointed one of its members to attend the meetings of this association as its representative.

These directors so appointed and the executive committee, president and secretary of the district association have the responsibility of the marketing association. For its working a manager, grader and seller and a secretary were appointed.

The method of dealing with the stock is as follows: Members give the secretary lists of the stock they wish to consign and he, when the animals on these lists are sufficient to form a consignment, appoints a day for the delivery of the stock and notifies the manager accordingly. It is a rule that the loads are made up in the order of the lists. On the appointed day the manager weighs, grades and generally looks after the stock, and also decides, according to information which has been received, which is the best

market. On the day on which the stock is consigned members who are in need of cash bring the slips showing the weight, grade, etc, of their animals to the secretary, who advances them as much as is compatible with the retention of a safe working margin. When the secretary has received the returns of sales he makes out the sum of the total expenses, divides this by the total weight, and then finds out the expenses for 100 lbs. Each member then receives a statement showing the amount received for his stock, minus the costs calculated at the rate per 100 lbs. and any advances he may have received. A cheque for the balance is handed or posted to him. The costs and returns of every consignment thus balance, and every consigner receives the full net profits realized by his stock, including such as formerly went to the middleman.

Altogether some thousands of dollars have been saved, and prices have been kept up as far as the quotations of the middlemen have been concerned.

ITALY.

1. THE DELIBERATIONS AND VOTES OF THE THREE COMMISSIONS FOR CO-OPERATIVE PRODUCTION AND LABOUR, CO-OPERATIVE CONSUMPTION AND AGRICULTURAL CO-OPERATION, NOMINATED BY THE CONGRESS OF ITALIAN CO-OPERATIVE SOCIETIES [IN DECEMBER 1916. — *La Cooperazione Italiana*, organ of the *Lega Nazionale delle Cooperative*, No. 1240, Milan, 27 April 1917.

At the Congress of Italian Co-operative Societies on 17 and 18 December 1916 (1) three commissions of experts were nominated to investigate the most urgent problems connected with co-operative production and labour, co-operative consumption and agricultural co-operation. In a congress of these three commissions recently held at Milan some important decisions were taken, among others, as to the "interior reorganization of co-operative organization". The necessity of undertaking this reorganization immediately was recognized, of grouping, that is, in accordance with their respective commercial and industrial activity, the various forms of co-operative societies existing in Italy, in a manner which will increase their economic and social importance; and the *Lega nazionale* was invited to distribute the federated societies in branches, according to whether they are concerned with a) consumption, b) production and labour, or c) agriculture. Until these three distinct national federations should be constituted the commissions themselves undertook to assist and guide the three groups of societies, in the matter of their business and by advising them as to their technique, administration and book-keeping, each of the commissions agreeing to work, in agreement with the league's directing council, as a central committee for its respective federation. It was determined that the commissions should devote themselves especially: a) to giving increasing unity of action to the co-operative movement and favouring the fusion of local societies in federations and consortia by connecting each with its respective national federal group; b) to defending the rights of co-operative societies and

(1) See our issue for March 1917, page 26.

procuring their sanction by strong legislative measures; c) to helping the efforts of co-operative societies where credit is concerned whether in relation to works put up for tender, requisitions of provisions, the cultivation of lands, collective farms or the foundation of establishments, works and industries, etc.; d) to organize offices, departments for collective buying, and means of production and distribution, with the object of giving to co-operative business, which already deals with nearly a thousand million liras (1), a single basis, and a financial strength which will allow it to exert a beneficent influence on the Italian markets.

The resolutions concerned with the development of thrift, co-operation and national economy were no less important. They can be divided into three groups in accordance with their aims. In the matter of social legislation they asked: 1) that general insurance against sickness, disablement, maternity and the accidents of all kinds of labour should be obligatory; 2) that there should be fit laws to regulate labour and labour contracts; 3) that trades should be taught with the help of an ample supply of technical means; 4) that there should be labour universities for the higher education of the technical managers and the directors, inspectors and secretaries of industries, businesses and co-operative societies.

In relation to co-operation directly they asked further: a) that the legislation as to co-operative societies should be revised and rendered more precise, less ambiguous, and more accordant with the development of co-operation in its various branches of consumption, agriculture, production, labour and building; b) that the law as to the State's accounts should be revised, particularly where the jurisdictional aspect of tenders, auctions and private contracts are concerned, so that the execution of public works should be directly confided to the *labourers' co-operative organizations*, controlled by the State; c) that there should be legislation for the constitution of agricultural domains, colonies and collective farms, for the cession of the lands of public administrations to co-operative societies, and for a large provision of agricultural credit for all Italy.

Finally after the war: 1) a broad and courageous policy should be followed as regards public works, improvements, mountain basins, hydraulic installations, canalization, ports, railways and roads; 2) national and provincial commissions should be formed for the immediate investigation of conditions in the various districts of Italy and the elaboration of a vast programme for the increase of production, etc.

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2. CO-OPERATIVE SOCIETIES LEGALLY CONSTITUTED ON 31 DECEMBER 1915
 — *Annuario statistico italiano* (Italian Statistical Yearbook), 2nd Series, Vol. V, 1915.
Direzione generale della statistica e del lavoro, Roma, 1916.

We borrow from the Italian Statistical Yearbook, recently published by the General Direction of Statistics and Labour, the following data as

(1) 1 lira = about 9 $\frac{1}{4}$ d. at par

to the co-operative societies legally constituted on 31 December 1915, excluding those of which the chief aim is to afford credit. On the date named there were 8,251 societies in Italy as against 7,429 on 30 June 1914. They were distributed in categories as follows :

I. Co-operative consumption		2,312
II. Co-operative insurance		162
III. Co-operative agriculture and oenology		
1) Special agricultural industries and cultures . .	1,058	
2) Viticulture and oenology	132	
3) Silkworm breeding, sericulture, apiculture and derivatives	12	
4) Dairies and cheesemaking	169	
		<hr/>
		1,371
IV. Co-operative food-producing industries,		
1) Bakeries, mills, paste factories	89	
2) Butcheries and various food-producing industries	50	
		<hr/>
		139
V. Co-operative fisheries		122
		<hr/>
		4,106.
VI. Co-operative industrial production :		
1) Clothing, textile and derivative industries . .	110	
2) Wood and leatherwork	155	
3) Mechanical and metallurgical industries . . .	177	
4) Chemical and pharmaceutical industries . . .	56	
5) Decorative arts and ornamental products . .	117	
6) Electrical work	82	
7) Polygraphic and derivative industries	124	
8) Works for objects of hygiene	38	
9) Building, ceramic and glassblowing industries .	40	
10) Various industries	19	
		<hr/>
		918
VII. Co-operative building		704
VIII. Co-operative labour :		
1) Masons, stonecutters, cementers	939	
2) Journeymen, navvies, quarrymen	734	
3) Drivers, carters	201	
4) Dockworkers, porters	211	
5) Mixed	90	
		<hr/>
		2,175
IX, Various co-operation		348
		<hr/>
Total		8,251

The geographical distribution of these co-operative societies is as follows:

Emilia	1860	Campania	298
Lombardy	1484	Marches	266
Tuscany	851	Umbria	11
Venetia	731	Calabria	11
Piedmont	650	Abruzzi	79
Latium	520	Sardinia	57
Sicily	432	Basilicata	37
Liguria	407	Tripoli	2
Apulia	327	Erythrea	1

The co-operative societies of agriculture and oenology numbered 1242 on 30 June 1914, which number had risen, as has been seen, to 1371 on 31 December 1915. In these eighteen months there was therefore an increase of 129 societies.

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3. THE POSITION OF LOCAL FEDERATIONS OF CATHOLIC RURAL FUNDS ON 31 DECEMBER 1915. — *Cooperazione Popolare*, the organ of the Catholic rural funds and co-operative and mutual societies, Nos. 7 and 8, Parma, 8 April 1917.

In our issue for November 1916 (page 40) we announced that general statistics of Catholic rural funds were being drawn up by the Italian Federation of Catholic Rural Funds of Bologna. We borrow from the data already collected by this federation the following table, which resumes the position of local federations of Catholic rural funds adhering to the federation on 31 December 1915:

Local federations	Members	Reserve subscriptions	Deposits	Loans
		liras	liras	liras
Amatrice	2,360	56,533.15	959,348.88	806,286.52
Arezzo	1,440	12,608.11	594,191.49	452,703.56
Bari	1,170	31,799.59	239,154.88	177,039.94
Benevento	78	46,510.13	1,018,887.93	831,150.71
Bergamo	8,973	251,376.14	8,548,136.44	4,970,451.28
Bologna	7,544	147,348.15	3,626,841.02	1,768,312.44
Brescia	1,974	106,756.66	2,602,878.28	1,687,841.99
Cosenza	3,500	100,897.21	4,677,638.49	3,216,074.04
Fano	1,366	6,839.22	324,562.62	230,575.45
Faenza	5,677	123,795.94	3,322,799.35	1,797,757.65
Ferrari	3,841	78,689.04	993,655.50	917,516.15
Florence	4,198	43,362.08	1,140,697.67	831,358.25
Forlì	3,114	49,061.63	888,674.39	762,809.17
Isola della Scala	—	—	—	—
Lodi	1,580	13,008.19	804,120.52	552,323.59
Mazzara del Vallo	2,129	69,648.90	498,973.74	587,442.75
Milan	2,024	49,049.40	1,687,650.05	469,283.01
Mondovì	2,183	29,842.23	1,158,113.38	912,291.17
Palermo	5,246	226,792.35	3,256,247.45	3,857,601.37
Parma	3,732	186,327.80	3,281,679.27	2,918,127.95
Pistoia	4,280	85,704.43	1,644,153.86	1,887,125.09
Reggio di Calabria	380	7,913.40	98,154.83	94,620.56
Reggio d'Emilia	2,420	95,086.40	2,804,015.68	1,631,667.61
Rome	10,155	301,834.47	2,714,688.48	2,311,840.18
Rovigo	3,794	104,603.98	1,676,166.70	1,534,698.27
Salerno	824	217,011.80	316,103.12	193,300.15
Turin	10,771	385,303.41	11,405,519.59	8,242,261.64
Tortona	400	10,121.27	298,193.96	211,868.20
Treviso	5,925	125,409.66	2,877,173.20	2,347,121.60
Total	101,078	2,952,334.94	65,458,420.77	46,201,452.29

To-day there are about 2,000 Catholic rural funds in Italy, as appears from the list which this federation published in 1916. Out of this number more than 1,000 are affiliated to the provincial federations already mentioned. The latter have also become more numerous, the diocesan federations of Asti, Udine, Semigallia etc. having been constituted recently.

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4. THE DEVELOPMENT OF THE CO-OPERATIVE MOVEMENT IN THE ABRUZZI.

— *La Cooperazione italiana*, No. 1238, Milan, 6 April 1917.

We borrow from a report, presented to the last Congress of the Agricultural Labourers of the Abruzzi by a member of the council of the National League of Co-operative Societies, the following data as to the position of the co-operative movement in the Abruzzi at the end of 1916. At this date there were altogether in this district 113 co-operative societies, distributed as follows: 13 for consumption and agriculture; 6 for labour; 6 for credit, including rural funds; 7 co-operative agricultural consortia; 52 societies for the mutual insurance of live stock. They included 18,000 members, had a capital of 735,000 liras and a turnover of about 10,000,000 liras, neither of the latter figures covering the societies for the mutual insurance of live stock. So much as to the co-operative movement in general. As regards agricultural co-operation in particular it is represented by agricultural co-operative societies, co-operative credit societies and rural funds, agricultural consortia, and mutual live stock insurance societies.

The agricultural co-operative societies consist of agriculturists and small landowners and aim principally at buying articles useful to agriculture and selling them to their members.

The co-operative credit societies and rural funds have a similar membership and supply their members with the sums needed for the cultivation of their lands. Some of them also practise the collective buying of implements, seeds, manures, fertilizers, and distribute them among their members at cost price.

The co-operative agricultural consortia are open to all persons who are at the head of a farm and buy or sell articles useful to agriculture.

The societies for the mutual insurance of live stock propose to indemnify their members for losses resultant on injuries suffered by their insured animals.

All these societies tend moreover to improve the agricultural industry and raise the moral and intellectual level of their members.

The co-operative credit societies and the rural funds have had the largest development, having 10,300 members, 35,000 liras in capital shares and a turnover of about 9,500,000 liras. Next to them come the co-operative agricultural consortia which have 2,200 members, 82,000 liras in capital shares and a turnover of 230,000 liras; while the cooperative agricultural societies have 1,500 members, 20,000 liras of capital and a turnover of 125,000 liras; and the mutual live stock societies about 2,000 members.

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5. THE "FEDERAZIONE ITALIANA DEI CONSORZI AGRARI" IN 1916. — *L'Italia Rurale*, organ of this federation, 25th year, No. 355, Piacenza, 10 March 1917.

The report of the administrative council of this Italian Federation of Agricultural Consortia of Piacenza shows that in 1916 sales brought in

27,156,957.37 liras as against 19,240,443.16 liras in the preceding year. We should notice that 89,000 quintals (1) of sulphate of copper and about 20,000 quintals of Caffaro paste were provided. Equally important were the importation, for the provisioning of the co-operative factories of superphosphates in Piacenza, Cremona, Novara, Secugnago (Lodi), Bagnolo Mella (Brescia) and Cerea (Verona), of 43,295 tons of phosphorites and 200,000 quintals of British coal, and the importations for the threshing of grain, the compression of forage and ploughing. Agricultural machinery accounts for 2,913,725 liras of the sum arising from sales, that is for 100,000 liras more than in 1915.

We pass over in silence much initiative on the part of the federation for the improvement of agriculture in the country; but note that on 31 December 1916 the federation's capital was 198,075 liras — made up of 7,923 shares of 25 liras each, subscribed by 1,336 members, and of a reserve of 187,990 liras.

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6. AN OFFICE OF INSPECTION AND AID FOR THE AGRICULTURAL CO-OPERATIVE SOCIETIES AT BOLOGNA. — *La Cooperazione Italiana*, No. 1247, Milan, 8 June 1917.

In response to the votes of the Congress of Italian Co-operative Societies on 17-18 December 1916 the *Istituto Nazionale di Credito per la Cooperazione* at Rome founded and inaugurated at Bologna, on the 3rd of last June, an office for the inspection and aid of agricultural co-operative societies. This office proposes to support all forms of agricultural co-operation and in particular *collective farms*. "Assistance will take the form of visits to the farms and businesses and advice as to technical management and the most advantageous reforms. A study of the common action and initiative proper to the various co-operative societies will also be made, a system of exchanging visits being elaborated; reciprocal knowledge will be encouraged; the influence of the best examples disseminated; knowledge and appreciation of the agricultural co-operation of the smallest farmers will be cultivated; by-laws, rules, monographs, etc., will be collected and distributed; and a periodical will be founded in the interests of the agricultural societies to convey to the right quarter the resolutions and desires and a knowledge of the most urgent needs of the national agricultural co-operative movement".

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7. THE FORMATION OF THE "FEDERAZIONE NAZIONALE DELLE UNIONI AGRICOLE". — *Azione Sociale*, No. 9, Faenza, 1 to 15 May, 1917.

On the 25th of last April there was formed at Milan this National Federation of Agricultural Unions, otherwise of the Catholic organizations for the purchase of articles useful to agriculture. It has the form of a limited liability stock company and a capital of 500,000 liras, and aims at promoting and protecting the economic and moral interests of institutions existing

(1) 1 quintal = 220 lbs.

principally for the practice of agriculture. To reach this aim the new federation proposes : a) to assist and represent agricultural federations, rural unions and their adherent agricultural associations, protecting their general interests and promoting their greatest possible progress by demanding such measures of a public order as are most accordant with the importance of their function and the utility of their development ; b) to promote the formation of new agricultural unions, federations and associations ; c) to contribute to increasing as much as possible the co-operative purchase of primary materials, co-operative cultivation, and co-operative marketing, abroad and at home, of products of the soil ; d) to buy and sell and, if required, to produce, in the interests of adherent associations, manures, seeds, machinery and all that can be useful to agriculture ; e) to contribute to procuring funds for adherent institutions ; f) to act, in general, towards the agricultural associations as a centre for information, technical and legal advice and commercial and financial assistance, in the interests of agriculture, agriculturists and the country.

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8. A MEETING OF AGRICULTURAL CO-OPERATIVE SOCIETIES AT BOLOGNA. — *Bollettino dell'Ufficio del Lavoro*, No. 13, Rome, 1 July 1917.

A meeting of agricultural co-operative associations at Bologna on the 3rd of last June passed two noteworthy orders of the day in favour of compulsory insurance against the accidents of agricultural labour, and of agricultural co-operation and modern social legislation. The latter ran as follows : " The agricultural co-operators, met together at Bologna, ask : 1st that the consortia of co-operative labour societies, formed under the law of 1909, be allowed to have ceded to them lands which they will either cede in their turn to their members or themselves farm ; 2nd that farmers or their associations be preferred as lessees, on long leases or otherwise, of lands belonging to public institutions, religious or other ; 3rd that the programme laid down by the Minister Raineri in his speech at Treviso, as to improvements, the commission for equitable letting contracts, accidents affecting harvests and defective harvests, become law as soon as possible ; 4th that credit be provided for improvements, as well as the credit necessary for the eventual purchase of lands which have been improved or have in some way been reserved for their farmers, the acquisition of land by landless agriculturists being thus facilitated ; and 5th that all public works, and reforms and other measures extending the cultivated area, intensifying agriculture and increasing production, be realized as soon as possible, the masses of the labouring population being thus profitably attached to the soil ".

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9. THE POSITION OF THE PROVINCIAL FEDERATIONS OF THE CATHOLIC RURAL FUNDS OF BOLOGNA, FLORENCE AND PISTOIA. — *Cooperazione popolare*, Nos 12, 13, 14. Parma, June and July 1917.

The position of the *Federazione delle Casse Rurali e Popolari* of the province of Bologna, one of the most important Catholic federations in Italy.

on 31 December 1916, is resumed by the following figures: Number of federated funds 89; number of members 7,628; capital in shares 116,421 liras; deposits 4,927,340 liras; interest paid, interest not due and various liabilities 33,333 liras; loans 1,531,602 liras; deposits in institutions of credit 2,239,453 liras; State and various securities 1,112,571 liras; cash 119,906 liras; merchandise and various assets 141,449 liras; year's income in 1916 195,511 liras; expenditure in that year 117,622 liras.

The position of the federation of Florence in 1916 was as follows: number of federated rural funds 29, number of members 4181, bills in hand 798,716 liras, loans (1 fund) 2,350 liras; deposits in specie in various institutions 568,470 liras; real estate (4 funds) 32,042 liras; securities 85,527 liras; furniture and costs of establishment 5,796 liras; bills and credit pending (2 funds) 4,775 liras; other assets (6 funds) 2,074 liras; capital — members' shares 6,399 liras, reserve fund 35,438 liras; liability deposits 1,527,216 liras; current liability accounts in various establishments (6 funds) 31,275 liras; bills (liability — 3 funds) 8,500 liras; other liabilities 5,752 liras; net profits (24 funds) 6,913 liras; deficit (5 funds) 594 liras.

Finally the position of the federation of Pistoia at the end of 1916 gives the following figures: number of federated funds 40; number of members 4,407; turnover 16,092,860 liras; total loans to members 5,614,595 liras; deposits on 31 December 1915 — 1,644,153 liras; on 30 April 1916 — 1,899,185 liras; on 31 December 1916 — 2,407,101 liras; and on 30 April 1917 — 2,751,652 liras (1).

This federation also represents and administers the federation of the mutual societies for insuring live stock of Pistoia, which includes 25 mutual societies and had in 1916 an average insured capital of more than one and a half million liras.

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10. FORMATION OF NEW SOCIETIES. — *Giornale di Agricoltura della Domenica*, No. 14 Piacenza, 8 April 1917. *L'Agricoltura toscana*, No. 10, Florence, 31 May 1917.

Recently there was formed at Florence the *Associazione cooperativa fra i proprietari e utenti di boschi* (Co-operative Association among Owners and Usufructories of Woods). It consists of owners of woods and those enjoying rights of common in them and aims at the sale in common of the products of forestry. It proposes to open stores where these products may be marketed, to make to members or procure for them advances on the products offered for sale, to instal nurseries for building up woods anew, and to found an office

(1) On the 27th of last June there was legally constituted at Rome the *Federazione Ufficiale delle Casse rurali ed operaie* (Official Federation of Rural and Workmen's Funds), a limited liability co-operative society with unlimited capital. It proposes to act as a central society which will watch over, protect and help, financially and otherwise, its shareholder societies; and also to encourage the formation of new popular societies for credit and co-operation, and to develop, by means of its shareholder societies, the exercise of agricultural credit.

which will give technical advice as to plantations and value the products, and also an office which will give legal advice as to the application of forest laws and rules.

Further the propaganda of the agricultural committee of Casalmaggiore has led to the foundation in the low district of Cremona of some consortia of agriculturists which will conduct in common, by exclusively mechanical methods, corn harvesting and ploughing. Six consortia have been legally constituted. Their sphere of action comprises altogether a cultivated area of more than 15,000 Cremonese perches (1).

These associations proceeded to buy various petrol engines, and the agricultural committee voted a notable financial contribution to the consortia, and has already done what is necessary to unite them for purposes of threshing, in order to obtain the government aid fixed by a recent decree.

Finally a new co-operative dairy has been installed at Casalbuttano in the province of Cremona. It owes its formation to the *Federazione delle latterie cooperative* (Federation of Co-operative Dairies) of this province, acting in agreement with the *Unione nazionale delle latterie sociali* (National Union of Social Dairies).

SWITZERLAND.

THE CO-OPERATIVE CORNMILL, AT LEMAN. — *International Co-operative Bulletin*, official organ of the International Co-operative Alliance, 10th year, No. 6, London, June 1917.

The co-operative societies in Western Switzerland have recently acquired possession of a cornmill at Lemman, this being the second such enterprise to be controlled by co-operators.

The initiative in regard to the purchase of the mill was taken by the co-operative societies at Vevey and Lausanne. The mill was put up for sale at a public auction and purchased by the societies for a sum of 73,050 francs, this bid exceeding that of a private mill-owner by 50 francs. In comparison with the real value of the mill the price paid must be considered to be very small. The premises are of much more modest dimensions than those of the cornmill at Zurich but are fitted with modern equipment. Only a year ago the mill was offered for sale at 170,000 francs. It is situated on the banks of Lake Geneva, at a few minutes' walk from the village of Rivaz. It has its own quay, to which in normal times all its corn supplies can be sent directly, by water from Geneva.

The weekly production of the mill is at present from 500 to 600 sacks of flour, but in normal times when a few new machines have been added, it can be brought up to about 900 sacks a week. This would enable the mill to supply the needs of a large number of societies in the west of Switzerland. All necessary preparations are now being made to allow the mill to begin to work as soon as possible.

(1) 1 Cremonese perch = 966.451 sq. yds.

UNITED STATES.

THE CALIFORNIA PEACH GROWERS' ASSOCIATION IN 1916-1917. — From *California Fruit News*, Vol. 55, No. 1511, San Francisco, 23 June 1917.

The business of this important organization brought excellent results in the year which ended on 31 May 1917. The association was able to pay to peach growers an average price of about 6 cents a pound for the fruit they delivered, individual prices varying with size and quality. In addition a dividend of 7 per cent. was paid to shareholders.

The association's balance-sheet shows that on 31 May 1917 assets amounted to \$ 1,381,676.74. They included fixed assets representing \$ 149,533.66 (land, buildings, plant and office equipment), balances in banks amounting to \$ 299,405.44, peaches in stock representing \$ 231,793.23, and packing material representing \$ 25,093.92. Total current liabilities amounted to \$ 421,992.94; and comprised \$ 334,612.77 due to growers in final settlement, \$ 112,518.80 being the balance of $\frac{3}{4}$ cent paid for each peach delivered, and total issued stock amounting to \$ 847,165. The authorized stock amounts to \$ 1,000,000.

Part II: Insurance and Thrift

ITALY.

THE TUSCAN FEDERATION FOR THE MUTUAL INSURANCE OF LIVE STOCK AND ITS FIRST RESULTS.

SOURCE:

PACI (C.): *La Federazione Toscana delle Mutue Bestiame (The Tuscan Federation of Mutual Live Stock Societies)*. Report of 1st year of business (1 July 1916 to 30 June 1917). Ufficio Toscano della Mutualità Agraria. Florence, 1917.

§ 1. AIMS AND REGULATION OF THE FEDERATION.

On 16 June 1916 this federation, the *Federazione Toscana delle Mutue Bestiame*, was constituted on the initiative of the *Ufficio Toscano della Mutualità Agraria*, or Tuscan Office of Agricultural Mutuality, with a reinsured capital of 658,063 liras.

The aims of this new institution, which has happily survived its first year of business, are : 1) the union in a single body of local mutual live stock societies, without distinction of faith or politics ; 2) the promotion, by advice and help, of the constitution of new societies for the mutual insurance of live stock and the perfection of their technique and administration ; 3) the stimulation, standardization and co-ordination of the work of local mutual societies in improving zootechnical production and providing prophylactics ; 4) the defence of the mutual federated societies against unjust fiscal taxation ; 5) their partial indemnification for losses due to mortality among live stock.

It must be remembered that in Italy the federative movement in the field of the mutual insurance of live stock is still in its initial stage; and exemplified only in the *Federazione Provinciale delle Mutue Bestiame di Milano* (Provincial Federation of Mutual Live Stock Societies of Milan) which arose in 1906 owing to the initiative of the *Ufficio Agrario della Società Umanitaria* (Agricultural Office of the Humanitarian Society), and which in 1912 included sixteen federated mutual societies and had a reinsured capital of 170,400 liras.

To the Provincial Federation of Milan, which was dissolved in 1914 for reasons independent of its perfect organization, belongs the credit of having first in Italy faced and solved the difficult problem of the reinsurance of live stock, and of having left a large heritage of data and expe-

rience which are of the highest value to students of this important branch of agricultural mutuality.

An example of simple federative grouping which has no provision for reinsurance or for compensation for risks, is afforded by the *Federazione Provinciale delle Mutue Bestiame* of Aquila, founded a few years ago.

Subsequently at the beginning of the war there were constituted at Genoa, by the efforts of the office of Agricultural Mutuality, the *Federazione Regionale Ligure* (Regional Federation of Liguria), and at Alexandria, on the kindly initiative of the provincial administration, the *Istituto Provinciale Autonomo di Riassicurazione del Bestiame* (Autonomous Provincial Institute for the Reinsurance of Live Stock).

The Tuscan Federation, already mentioned, is thus the sole institution of its kind in Italy, and, as has been said, it has recently completed its first year of business.

In this district there are forty-three mutual live stock societies, of which nineteen charge fixed annual premiums and have regular administrations. The others work on the principle of share-quotas and have more or less rudimentary administrations.

The technical and administrative organization of the federation with which we are concerned is based on the reinsurance of a portion of the risks of single mutual societies, they being enabled to reinsure a quarter or a half of their total risks. In the former case a society pays to the federal fund 25 per cent. of its annual premiums and the federation intervenes when each casualty occurs, paying an indemnification quota equal to 25 per cent. of the loss for which the mutual society becomes liable; in the second case a society pays to the federal fund 45 per cent. of its annual premiums and the federation intervenes to pay 50 per cent. of each loss incurred.

However the various societies, even if they are severally active in almost identical surrounding conditions, are subject to different risks according to the greater or less attention which is paid to hygiene, the prevalence or otherwise of milch-cows among insured animals, the greater or less watchfulness of administrators, etc.; and therefore some are a greater source of expense to the federal fund than others.

At present, in order at least partly to eliminate this inequality which might be an eventual source of discontent among the best organized societies and those which worked most regularly, there is an annual distribution of profits which have eventuated among those societies which are out of pocket through their dealings with the federation. Thus while at the end of every financial year half the profits go to the reserve fund, the other half are restored, according to a determined scale, to the societies which have paid more than they have received.

The amount of the profits accruing to each society is deducted from the premiums due in the next year, so that the federated society pays for reinsurance in that year only the difference between such amount and the normal reinsurance premium.

The federated societies preserve their autonomy, being merely obliged to allow the inspection of their technique and administration.

§ 2. THE RESULTS OF THE FIRST YEAR.

The federation became active on 1 July 1916 when it included seven of the ten mutual societies now federated. The following table shows its relations with each of its federated mutual societies on 30 June 1917 :

Headquarters of the Mutual Society	Number of heads of stock insured	Capital insured	Per- centage re- insured	Capital reinsured	Federal quota	Number of casual- ties	Indem- nities paid
Alta Staggia	422	286,000	50 %	143,000	723.27	3	591.90
Ambra	280	224,475	25 %	56,118	794.42	8	382.28
Canonica Cerreto	327	286,000	25 %	59,000	—	—	—
Modigliana	124	108,000	25 %	27,000	156.68	—	—
Poggibonsi	223	237,300	25 %	59,323	180.50	1	64.12
Porcari	112	76,000	25 %	19,000	424.93	10	412.38
Prato	400	260,000	50 %	130,000	1,203.61	5	838.00
St. Quirico d'Orcia	570	343,000	25 %	85,750	384.58	1	65.00
Tizzana	194	77,000	50 %	38,500	441.63	6	441.09
Valtriano	98	80,740	50 %	40,370	225.00	4	355.88
Total	2,850	1,928,515	—	658,063	4,584.62	38	3,150.65

From these data it appears that from 1 July 1916 to 30 June 1917 indemnities were paid in all for 38 casualties and amounted to 3,150.65 liras. The difference between the reinsurance premiums paid by single societies and the indemnities paid to them was 1383.97 liras.

As regards its finances the federation could not have attained to better results in its first year. The following table shows the amount of loss incurred on every 100 liras of insured value by each federated mutual society.

Name of Mutual Society	Insured Capital	Number of Casualties	Total Loss insured	Percentage of mortality
Alta Staggia	286,000	3	1,182.80	0.41 %
Ambra	224,475	8	1,529.12	0.46 %
Modigliana	286,000	—	—	—
Poggibonsi	237,300	1	256.48	0.20 %
Porcari	76,000	10	1,649.52	2.17 %
Prato	260,000	5	1,676.00	0.72 %
St. Quirico d'Orcia	643,000	1	220.00	0.06 %
Tizzana	77,000	6	882.18	1.14 %
Valtriano	80,740	4	711.76	0.86 %

This table shows that the mutual society of Modigliana, the reinsurance of which was effected only on 1 May 1917, has not yet suffered any loss; the societies of St. Quirico d'Orcia and Poggibonsi have suffered a minimum loss; those of Ambra, Alta Staggia and Prato one which is below the average; those of Tizzana and Porcara have kept almost entirely within the anticipated limits of mortality; and that of Valtriano, while losing only 0.86 per cent., has received 130.88 liras in addition to the amount of its premium.

The profits attained by the federation therefore depended on the exceptionally favourable conditions of the year, owing to which one of the federated societies (Modigliano) suffered, as has been seen, no casualty in two months; seven kept more or less below the anticipated level of mortality; while one (Valtriano), although it did not reach the rate of mortality estimated for it, namely 1 per cent., received an indemnity greater than its reinsurance premium. The reason for these facts should be sought in the excessively low estimate of the insured capital, single animals having been valued, when insured, at much less than their actual value, so that when the losses which occurred were estimated each animal was found to have a far higher value.

As regards the more or less suitability of the reinsurance to the needs it is intended to supply, this — as the director of the federation in question observes in his report — cannot be gauged by the results of only one or two years, for there is no equal and constant average mortality for the live stock in one place: in a given year mortality may reach incredible proportions, such as would compromise the very existence of small mutual societies. From statistics of the mutual societies at work in Tuscany the following data are taken: the society of Prato in its first year of activity had a mortality of 2.42 per cent., in its second year 3.20 per cent., in its third 0.72 per cent.; the society of Tizzana in its first year had a mortality of about 2 per cent., in its second 1.60 per cent. in its third 1.14 per cent.; the society of Porcari one of 4.80 per cent in the first and 2.17 per cent. in the second year; that of Ambra an average of 0.90 per cent. in its first five years, 1.20 per cent. in its sixth, 0.46 per cent. in its seventh year, etc.

The federation with which we are concerned wished as far as possible to maintain an equilibrium among the burdens of various societies, and partially to compensate those which, owing to their excellent organization or low mortality, could contribute most largely to the formation of a federal reserve. Therefore article 25 provides that that half of the profits, which at the end of every year is not destined for the reserve fund, must go to diminish the contributions of the mutual federated societies in the next year, in the measure of the difference between the premiums paid and the indemnities received by each mutual society. On the basis of this article, which tends to render reinsurance less burdensome, the entire net profits, which in this first year amounted to 1141.49 liras were divided into two equal parts, of which the one — namely 570.75 liras — was appropriated to the reserve, while the other — 570.75 liras — was distributed, in the form of deductions from the reinsurance premiums due in the second year, among societies which on 30 June had paid the federation more than they had received from it.

The following table shows the difference in the case of each mutual society between the reinsurance premium and the indemnities received, the reimbursement quota being calculated as 60 per cent. of this difference :

Name of Mutual Society	Premiums paid	Indemnities received	Difference		Quota reimbursed
			received	paid	
Alta Staggia	723.27	591.90	—	131.77	78.82
Ambra	794.42	282.28	—	118.84	71.30
Modigliana	156.68	—	—	—	—
Poggibonsi	180.50	64.12	—	116.38	34.90
Porcari	424.93	412.38	—	12.55	7.52
Prato	1,203.61	838.00	—	365.38	—
Tizzana	441.63	441.09	—	0.54	—
Valtriano	225.00	355.88	130.88	—	—
St. Quirico d'Orcia	384.58	65.00	—	264.78	158.86
	4,534.62	3,150.75	—	—	570.75

In the cases of the mutual societies of Ambra and St. Quirico d'Orcia, it should be noted further that the difference as calculated in the third column is not the arithmetical difference between premiums paid and indemnities received, since these two societies paid the reinsurance premium the one to cover the period up to 28 February 1918, the other to cover that up to 30 September 1917 ; and naturally in distributing premiums only the premiums due up to 30 June 1917 were taken into account.

Finally the federation devoted much of its activity to helping, especially in the matter of book-keeping, the adherent mutual societies ; and to propaganda in favour of the economical feeding of live stock, the more extensive cultivation of forage crops, and more intensive stock farming. In recognition of the federation's beneficent work the Ministry of Agriculture granted it a subsidy of 1500 liras, and this with half the year's profits — 570.75 liras — amounted to 2,070.75 liras, which sum constituted the federal reserve on 30 June 1917.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

ITALY.

1. THE DEVELOPMENT OF THE "MUTUA AGRARIA GRANDINE" (1) OF BOLOGNA. *Bollettino dell'Associazione Agraria Parmense*, No. 17, Parma, 28 April 1917.

We have already stated, in speaking of the agricultural employers' societies in Italy (2), that their task is not confined to opposing resistance in various forms to the associations of labourers on the land, but that they also occupy themselves with organizing within themselves, in the interests of their members, various autonomous departments having economic and technical objects. One of these is the *Mutua Agraria Grandine* which has its offices at Bologna and was formed in 1911 by the *Federazione Interprovinciale Agraria*. This mutual society has adopted an insurance premium composed of two quotas, the one fixed, and the other variable but limited and levied only when the fixed premium is insufficient. The society's development appears in the following table.

Development of the Mutua Agraria Grandine of Bologna.

Year	Insured Capital	Premiums	Indemnities paid
	liras	liras	liras
1911	717,120	33,554.90	18,475.25
1912	2,928,710	133,111.09	136,056.94
1913	6,575,780	298,838.06	368,594.62
1914	9,734,150	571,841.23	601,880.10
1915	12,364,630	618,300.73	452,001.07
1916?	14,405,390	776,676.05	569,586.12

Thus in six years the society has paid indemnities amounting to 2,146,594.10 liras. It reinsures the greater part of its risks with the Excess Insurance Company of London.

* * *

2. THE "SOCIETÀ ITALIANA DI MUTUO SOCCORSO CONTRO I DANNI DELLA GRANDINE" (3) IN 1916. — Balance sheet for 1916. Milan. The society's printing-press, 1917.

This is one of the oldest societies in Italy insuring against losses occasioned by hail, for it was founded at Milan in 1857. We take the follow-

(1) Mutual Agricultural Hail Society.

(2) See our issue for April 1914, page 28.

(3) Italian Society for Mutual Help against Losses by Hail.

ing facts as to its last year of business from the report of its council of administration.

1916 gave the maximum figure for risks insured by the society: in round figures 100,800,000 liras with a membership of 17,731. The membership had increased by 1071 since the preceding year and the risks by about three and a half million liras. It was a year of violent hail. Out of 221 days of risk there were 99 on which the harvests of members were attacked (there were quite 75 days of hail in the summer), so that on 31 July actual losses of two and half million had already been recorded. The autumn was more propitious, bringing only 24 days of hail. Thus the summer which represents three quarters of the risks, represents a loss; but the autumn a gain. The year's balance-sheet shows a loss of 127,529.86 liras and an actual deficit, including premiums, indemnities and costs, of 268,292.68 liras; so that when losses had been paid, amounting to 3,786,973.08 liras, these together with costs of administration absorbed in addition to the recovered premiums income on capital to the extent 140,762.82 liras, and 127,529.86 liras which the council of administration took from the reserve fund. The deficit of 127,529.86 liras represents the difference between the tariff of 4.67 per cent, which would have been necessary to balance receipts and expenditure, and that of 4.54 per cent. which members actually paid.

* * *

3. THE ORGANIZATION OF THE "TERRA ITALICA", A MUTUAL SOCIETY FOR INSURING AGAINST THE ACCIDENTS OF AGRICULTURAL LABOUR. — The society's by-laws, Rome, 1917.

In our issue for last March we announced the recent formation of a new mutual society for insuring against the accidents of agricultural labour (1) calling itself *Terra Italica* and being an outcome of the initiative of the woodcutters' syndicate. The new society has secured the adhesion of most of the members of this syndicate and of many farms in the various districts of Italy. As appears from its by-laws its headquarters are at Rome and its action extends over all the agricultural industries which its members practise in the kingdom. It proposes to pay to labourers employed on its members' farms, in case of the accidents contemplated by the law of 31 January 1904, No. 51, the indemnities fixed by a regulation made *ad hoc*. A statement must be made in the case of every farm to be insured: 1) as to the extent of land to be sown, planted with vines and planted with olive trees, that of the arable land lying bare, that of vineyards and special crops, that of underwood, and of woods of forest trees, edible chestnuts and pines, and that of uncultivated land and pastureland; 2) as to the families of labourers dependent on the farm with detailed lists of their members; 3) as to the numbers of labourers normally employed during the year and in the various seasons on agricultural labour.

(1) For mutual societies insuring in Italy against the accidents of agriculture see our issue for January 1917, page 43.

On admission a member must pay a fee of ten centimes for every hectare (1) of cultivated and five centimes for every hectare of uncultivated land. He must also pay annually fifty centimes on every hectare of land to be sown, seventy centimes on every hectare planted with vines or special crops, and three centimes on every hectare of uncultivated and pastureland. The annual insurance premium will be paid quarterly and in advance. The status of membership is completely acquired at midday on the day following that on which the admission fee and insurance premium are paid.

The members incur an obligation to remain in the society for five years. The society has the right to cause inspections in order to ascertain that there is sufficient provision for the safety of labourers. Every year in April members must inform the society of changes which may have occurred in their farms, in respect of area, crops or other particulars affecting in any way the estimate of wages. A provision should be noted which allows the council of administration, if at the end or even during the course of a business year it considers it necessary to increase its available funds in order to have the means of paying indemnities for accidents which have occurred, to invite members to pay a supplementary quota. Thus premiums are always exacted from members and paid by them only provisionally.

A member must pay sums demanded of him on any pretext within ten days of his reception of the request. The sums due may be augmented by fines at the rate of 10 per cent. of their total amount if payment is deferred more than ten days beyond the date fixed for it. The member concerned is responsible for accidents occurring during this interval of ten days. A member may be expelled for declarations of fact made in bad faith, if modifications introduced into his farm have transformed or aggravated risks, if he be declared to have failed, etc. He is thus excluded from all right to savings, the admission fee and the reserve funds. Finally if a farm be sold or given away the member concerned must advise the society within fifteen days and transfer to the grantee or purchaser the obligation to continue his insurance for the current year. He and his assigns are collectively responsible for the payment of the premiums for the current year.

* *

4. THE PROVINCIAL FEDERATION FOR THE REINSURANCE OF THE MUTUAL, LIVE STOCK SOCIETIES OF THE PROVINCE OF PORTO MAURIZIO. — *La Mutualità Agraria*, No. 17, Rome, 20 June 1917.

This new federation has according to its by-laws the following objects: a) the encouragement of the formation of local mutual societies, and of the adhesion to the federation of those already formed or in course of formation; b) the direct or indirect assistance of federated mutual societies and the inspection of their administration and books; c) the organization of an active propaganda in favour of preventive measures intended to combat

(1) 1 hectare = 2.47 acres.

the infectious diseases of live stock, and the facilitation of the organization of a collective veterinary service and of the common purchase of medicines and disinfectants ; d) the stimulation, standardization and facilitation of the work of local mutual societies in improving zootechnical production, improving pasturage and local roads, establishing a stricter system of forestry, and inducing the societies to negotiate for agricultural credit, etc. ; e) the preparation of statistics, reports and all that can serve better to direct the work of insuring live stock ; f) the partial indemnification of the mutual federated societies for losses which may occur in any year owing to an excessive mortality among live stock due either to natural causes or to accidents.

The federation will moreover take on its own initiative such action as it judges to be in its own interest and that of its members in the matter of elaborating by-laws and rules and uniform systems of book-keeping. Adherent mutual societies will pay an entrance fee of ten francs for every hundred or fraction of a hundred members, and will have the right of availing themselves of the federation's legal services, consulting it, and benefiting by its technical and administrative inspections.

The federation reserves the right to inspect at any time the books of federated mutual societies, to make inspections and visits on the spot when live stock are being valued and when sicknesses and accidents occur. The mutual societies may not oppose this right.

The by-laws of mutual societies desiring to be federated must contain the following principles ; a) a strictly local sphere of action ; b) the individual insurance of animals ; c) insurance according to value ; d) the contribution of the insured to insurance at the rate of 20 per cent ; e) the premium fixed at no less than 1.20 per cent. of the value of the insured stock.

The federation undertakes to pay to a local mutual society two thirds of the indemnities annually due for *exceptional casualties*, that is those causing losses in excess of 1 per cent. of the insured value. The third part of the indemnity due for such excessive risk and that due for the whole ordinary risk are the liability of the local society.

The federation's income is constituted by the admission fees of the local mutual societies and the ordinary and extraordinary contributions of the State, the province, other institutions and individuals. It will provide for a reserve fund to be formed of extraordinary income and sums remaining in hand at the end of each year (1).

* * *

5. THE " CASSA MUTUA CONTRO GLI INFORTUNI AGRICOLI " (2) OF FLORENCE IN 1916. — *L'Agricoltura toscana*, No. 13, Florence, 15 July 1917.

In Italy there are six mutual societies formed by the spontaneous initiative of owners and managers of farms. They aim at insuring against

(1) In Italy other provincial federations of mutual live stock societies also practise reinsurance. The first of them to be active in this field was that of Milan, and recently like activity has been contemplated by the *Federazione Toscana delle Mutue Bestiame* (Tuscan Federation of Mutual Live Stock Societies). See our issue for December 1916, page 59.

(2) Mutual Fund against Agricultural Accidents.

the accidents of agriculture. They are situated at Vercelli, Florence, Bologna, Milan, Turin and Rome. One of the best organized is that of Florence which at the end of last February had 777 members insuring 979 farms, comprising 12,849 properties of a total area of 325,082 hectares (1). The families of labourers belonging to these farms comprised 124,997 persons. Sixteen fatal accidents occurred in 1916-17. The accidents of this year are classified in the following table in accordance with their consequences and are compared with those of previous years :

Year	No. of Accidents Total	Deaths	Accidents leading to				In course
			Per- manent invalidity total	Per- manent invalidity partial	Tem- porary invalidity indemnified	Temporary invalidity not indemnified	
I 1909-10	190	1	—	14	77	98	—
II 1910-11	443	5	—	35	180	223	—
III 1911-12	659	9	—	51	268	331	—
IV 1912-13	788	11	—	63	336	378	—
V 1913-14	958	14	1	109	409	425	—
VI 1914-15	1,148	11	—	115	405	614	3
VII 1915-16	919	4	—	100	366	440	9
VIII 1916-17	749	16	—	32	203	384	114
	5,854	71	1	519	2,244	2,893	126

In order to facilitate the comparison of the different years, as regards the relation between the number of accidents and their consequences, the mutual fund of Florence has drawn up a little table, which we will presently reproduce, as to business in the years before 1916-1917. For the latter year, which closed on 28 February, there are as yet no definite figures, for 114 cases of accidents are in course of liquidation.

Only the ratio of the fatal accidents, which numbered as we have said sixteen, is known. They constituted 21.3 per thousand of the total number, having in previous years varied from 4.3 to 4.5 for every thousand accidents intimated. The following is the little table regarding the six previous years :

Effects	Per 1000 accidents intimated					
	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16
Death	11.2	13.6	12.6	14.5	9.5	4.3
Permanent invalidity .	79.0	77.4	76.2	105.5	100.0	108.9
Temporary invalidity in- dennified	406.3	406.7	426.4	428.0	352.8	398.2

(1) 1 hectare = 2.47 acres.

On 1 March 1917 this mutual fund began its ninth year of business. It is probable that before the year ends the insurance against accidents of labourers employed on farms will have become general in Italy by the effect of a special law.

UNITED STATES.

THE UNFAVOURABLE RESULTS OF INSURANCE AGAINST HAIL, IN 1916. — *The Economic World*, New York, 10 March 1917.

1911 was a bad year for insurance companies in the United States in so far as insurance against hail was concerned. There are as yet no detailed statistics for the whole country; but the Insurance Department of Massachusetts issues annual lists of figures, and so large a proportion of the more important companies report to this department that its list gives a good idea of general tendencies. The following are the figures thus supplied for 1916:

Company	Premiums	Losses
American	\$ 225,660.46	\$ 166,928.14
American Centra.l	33,466.80	72,268.93
City of Pittsburg	3,352.21	2,465.30
Cologne.	46,663.95	52,315.29
Commercial Union	284,700.00	316,340.00
Connecticut	159,839.41	113,985.41
Fire Reassurance	100,422.60	120,423.83
First Bulgarian.	123,169.99	157,022.65
First Russian	31,049.84	22,539.44
Frankline Fire, Pa.	164,447.78	150,546.77
German Alliance	30,232.27	33,004.08
German American	653,363.42	656,914.61
Glens Falls	78,036.00	75,771.00
Globe and Rutgers	18,869.92	13,950.31
Hamburg	63,277.28	52,318.76
Hartford	1,651,390.00	1,646,777.00
Home	1,480,346.81	1,447,031.45
Imperial	40,784.67	44,824.41
Insurance Company of North America	—	393.75
Jakor	49,717.86	41,107.59
Liverpool and London and Globe	243,037.55	179,205.00
London amd Lancashire.	34,482.00	30,962.49
Mechanics and Traders	34,834.41	28,868.12

Company	Premiums	Losses
Mercantile	11,882.09	11,771.43
Michigan Commercial . . .	54.75	—
Minerva	19,998.84	22,420.84
Minneapolis Fire and Marine	226,750.49	270,746.94
Moscow	49,679.73	36,063.07
National, Hartford	618,462.09	431,232.71
National Union.	83,270.47	47,077.74
North Western National .	409,899.93	363,535.44
Norwich Union	10,948.06	5,725.05
Old Colony	135.59	—
Orient	216,621.00	257,848.00
Palatine	102,443.00	158,787.00
Phoenix, Hartford	18,115.09	13,169.87
Phoenix, Assurance. . . .	87,361.31	89,072.13
Providence-Washington . .	92,521.37	94,519.98
Russia	148,575.87	167,883.60
Royal	30,307.02	25,210.54
Russian	31,049.84	22,539.44
Salamandra	49,717.86	41,107.59
Scottish Union and Na- tional	329.52	—
Second Russian	18,079.22	14,948.22
Security	156,697.70	170,906.00
South German	2,168.00	—
Springfield Fire and Ma- rine	495,571.07	476,046.07
St. Paul Fire and Marine..	1,055,725.72	1,060,749.13
Swiss Reinsurance	83,215.59	88,674.67
Westchester Fire	222,544.97	228,735.09
	<u>\$ 9,793,271.22</u>	<u>\$ 9,725,734.88</u>

With aggregate premiums of only \$9,793,271.22 as against aggregate losses of \$9,725,734.88, it goes without saying that the fifty companies in this list, taken as a body, lost heavily on their hail business in 1916; for commissions and management expenses, amounting on the average to well over 40 per cent. of premiums, had to be provided in addition to the losses. It is to be noted that of the fifty companies thirty showed some balance of premiums over losses — generally a very slender one — and twenty an absolute balance of losses over premiums. A careful comparison of losses and premiums makes it appear however, when account is taken of expenses, that virtually every company except the National of Hartford must have suffered a net loss last year. It is therefore not wonderful that a general raising of rates, as well as economy in administration and expenses, is now considered imperative by the companies.

URUGUAY.

THE STATE BANK OF INSURANCE AND INSURANCE AGAINST HAIL. — From the *Report and Balance-Sheet of the State Bank of Insurance in 1916*. Montevideo.

Owing to droughts, grasshoppers and frosts the harvest of 1916 in Uruguay was bad. The circumstance directly affected the business of the hail section of the State Bank of Agriculture, the development of which is necessarily connected with the condition of agriculture.

This section drew up in the year considered 2044 policies covering a value of \$ 1,118,639, as against 3867 policies, insuring altogether \$ 2,485,309, issued in 1915.

The following table shows the fluctuations of the business of insuring against hail from the year 1912 in which it was inaugurated.

	1912	1913	1914	1915	1916
Premiums	\$ 47,463	\$ 93,673	\$ 43,271	\$ 77,011	\$ 35,591
Indemnities . . .	\$ 8,977	\$ 27,893	\$ 10,259	\$ 2,410	\$ 3,720
Percentage of indemnities formed by premiums	19.22 %	26.77 %	24.63 %	3.13 %	10.45 %

The bank's propaganda action, exercised directly by the medium of its numerous agents, did not slacken ; but the unfavourable agricultural circumstances, which we have already noticed, paralysed its efforts. In 1915 it insured 104,890 hectares (1) but in 1916 the area covered by its policies was only 50,109 hectares.

The reduction of 1 per cent. granted in 1905 on tariffs affecting corn and flax was maintained last year. In addition to this reduction and in spite of the far from reassuring prospects which the sowing season opened up for this branch of the bank's business — prospects which have actually been realized — the administrative council thought itself obliged, owing to the damage done to crops by grasshoppers and frost, to add to its policies the following clause, the import of which need not be pointed out : "Agriculturists whose seeds have been wholly destroyed by frosts or grasshoppers after the issue of the policy will have a right to the reimbursement of 80 per cent. of the premium". The concession constitutes a remarkable improvement of insurance against hail : the reimbursement granted in similar circumstances in other countries is notably less.

(1) 1 hectare = 2.47 hectares.

Part III: Credit

ITALY.

THE AGRICULTURAL CREDIT OF THE SAVINGS BANK OF THE "BANCO DI NAPOLI" AND THE AGRICULTURAL CREDIT DEPARTMENT OF THE "BANCO DI SICILIA" IN 1916.

SOURCES:

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- DECRETO LUOGOTENENZIALE N. 1913 CONCERNENTE PROVVEDIMENTI PER IL CREDITO AGRARIO E PER L'AGRICOLTURA NELLE ZONE DANNEGGIATE DALLA INVASIONE DEI TOPI CAMPAGNOLI**
(*Decree of the Lieutenancy No. 1913 concerning Provisions for Agricultural Credit and Agriculture in the Zones damaged by the Invasion of Field Mice*), Gazzetta Ufficiale del Regno d'Italia, Rome, No. 182, 3 August 1916.
- BANCO DI NAPOLI. CASSA DI RISPARMIO. CREDITO AGRARIO. RELAZIONE SULL'ESERCIZIO 1916**
(*Bank of Naples. Savings Bank. Agricultural Credit. Report for 1916*), Naples, 1917.
- CONSIGLIO GENERALE DEL BANCO DI SICILIA. Sessione ordinaria del 1917. Rendiconto e bilancio consuntivo sul servizio del Credito agrario. Esercizio 1916.** (*General Council of the Bank of Sicily. Ordinary meeting of 1917. Report and balance-sheet of the department of agricultural credit. Year 1917*). Palermo 1917.

§ I. THE WORKING OF THE DEPARTMENT OF AGRICULTURAL CREDIT IN THE "BANCO DI NAPOLI" AND "BANCO DI SICILIA".

As regards its organization of agricultural credit Italy can be divided into two parts of which the one comprises Piedmont, Lombardy, Venetia, Emilia and Tuscany, and the other Liguria, Marche, Umbria, Latium, the continental south and the islands. In the former the organization of credit originated in the spontaneous initiative of the agriculturists who united to form co-operative societies (popular banks, rural funds, etc.), thus themselves supplying the need for credit; in the latter, on the other hand, private initiative was weaker and had to be completed by the action of the State. Thus there arose the various laws on agricultural credit which, in

response to the peculiar needs of single districts of Central, Southern and insular Italy, founded in them special institutions of credit. The chief of these laws are that of 7 July 1901 which authorized the savings bank of the *Banco di Napoli* to afford agricultural credit in the provinces of the southern continent of Italy and the island of Sardinia, and that of 29 March 1906 which instituted in the *Banco di Sicilia* a department for the exercise of agricultural credit. We should also recall the laws of 21 December 1902, 31 March 1904 and 25 June 1906, which concerned agricultural credit in Latium, Basilicata and Calabria, respectively, etc.

The fundamental principle of this legislation is that credit should, as a rule, be distributed among agriculturists not directly but by the medium of local institutions, preferably co-operative in form, which are called *intermediary*. Most of them are rural funds, popular banks, agricultural consortia, etc.; and since they are somewhat scarce in Southern Italy and the islands the laws which have been cited provide for the encouragement of their foundation by prize competitions and other means. Thus of recent years numerous *agricultural funds* have arisen and have noticeably increased the number of existing intermediary institutions. These are usually accredited by the various central institutions of credit (savings-bank of the *Banco di Napoli*, agricultural credit department of the *Banco di Sicilia*, Institute of Agricultural Credit for Latium, etc.) with a given sum, fixed according to their importance and the security they can offer.

The business which the two cited banks — the most noteworthy of Italian banks exercising agricultural credit — are authorized to undertake by the laws which respectively regard them may be summed up as follows:

- a) Acceptance for discount of bills issued by agriculturists for the various needs of their farms and ceded by the intermediary institutions;
- b) Acceptance for discount of bills directly issued by the latter either to procure the necessary means for the collective acquisition of materials useful to agriculture or to make advances to members in the case of collective sales of their products, etc.

In order that this transaction may take place it is necessary that the loan be proved to have an agricultural purpose. The borrowers are therefore specified: they must be landowners themselves farming their lands, holders of long leases, *métayers* or labourers receiving partial profits, or tenants of rural holdings. Moreover the land for the benefit of which the loan is requested must be situated within the sphere of activity of the lending institution; and the purpose of the loan must be stated in the application for it.

Unless their purpose demands that they be less, loans must have certain maximum limits as regards their amount and the time for which they are granted, such limits being 1,000 liras and one year for loans implying a legal preference (over the harvest, crops, seeds, manures, fertilizers), 2,000 liras and three years for loans to finance cattle farms, and 3,000 liras and three years for loans for the purchase of machinery.

As has been said, loans cannot normally be made to single agriculturists, but only to intermediary institutions among which those having

exclusively agricultural aims and character should be preferred. The loans should be made by the two banks cited to intermediary institutions at the maximum rate of 4 per cent., and by the latter to their members at the maximum rate of 6 per cent. The security given by the intermediary institutions is their own capital if they have limited, and that of their members if they have unlimited liability. The amount of possible loans varies in accordance with the capital and with the form of security given by the institutions. The latter enjoy in their turn, in relation to their members, special privileges, and also a true legal privilege established by article 1958 of the Italian civil code, which we have already mentioned, and a privilege by agreement arising out of the law of 23 January 1887 which has reference to the sums due to furnish live and other stock, agricultural machinery and implements, plant for the handling of agricultural products and all that can be useful to agriculture.

Such is, broadly, the system of State-regulated agricultural credit in the Banks of Naples and Sicily. We will now examine the work accomplished by these two banks in 1916.

§ 2. THE AGRICULTURAL CREDIT OF THE SAVINGS-BANKS OF THE "BANCO DI NAPOLI".

The Intermediary Institutions. — As appears in the last report of the Bank of Naples the institutions by the medium of which agricultural credit is, according to the law, distributed, increased from 2145, which was their number on 31 December 1915, to 2179, their number on the same date in 1916.

Of this number only 1203 were considered to be "good", that is fit to distribute credit. They were distributed as follows as regards their kind:

Agricultural and rural funds	482
<i>Monti frumentari e nummari</i> of Sardinia	288
Popular banks	145
Funds for agricultural loans	121
Agricultural consortia	120
Savings banks	16
Societies of agricultural credit	9
<i>Monti frumentari</i>	8
Societies of mutual aid	8
Provincial autonomous funds of agricultural credit	6

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Of these 1203 "good" institutions 114 (including 109 popular banks) are accredited at the bank for ordinary discount. Of their whole number 40.06 per cent. are nominally collective societies having collective and unlimited liability. This form of association is found throughout the eighteen provinces of the south and Sardinia: the province of Cagliari has the largest

number of societies of the sort, namely 127, that of Aquila 56, that of Salerno 51, that of Caserta 45 and that of Sassari 30.

At the end of 1916 there were 727 institutions which had opened current accounts for the amount of 28,695,100 liras; and they included 302 agricultural and rural funds — accounts for 10,124,500 liras, 130 popular banks — for 5,876,000 liras, and 91 agricultural consortia — for 8,475,500 liras. These institutions and the aforesaid sum of 28,695,100 liras were distributed as follows among the provinces:

Province	Number of Institutions	Current accounts opened — Liras
Sassari	89	1,596,000
Caserta	76	2,191,000
Cagliari	72	1,084,000
Teramo	65	2,392,000
Foggia	54	5,444,500
Aquila	50	1,765,000
Salerno	45	2,050,000
Benevento	37	765,000
Catanzaro	35	1,243,600
Lecce	33	1,348,000
Avellino	30	608,000
Reggio Calabria	24	1,149,000
Chieti	24	627,000
Bari	23	3,408,000
Campobasso	23	1,065,000
Potenza	22	1,268,000
Cosenza	14	401,000
Naples	11	290,000
Total	727	28,695,100

The greatest number of agricultural and rural funds are found in the province of Aquila which has 45 of them. Next to it come Salerno and Caserta with 39 each, Cagliari with 33, Avellino with 20, Benevento with 19, etc.

The greatest number of agricultural consortia are found in the province of Caserta which has 13 of them. There follow the provinces of Benevento with 11, Lecce with 10, Foggia with 9, etc.

Agricultural Credit Transactions effected in 1916. — Credit was afforded this year by the savings-bank of the bank for 11,934,643 liras (2,602,861 liras with the bank's own funds and 9,331,782 with the funds of the provincial funds of agricultural credit).

Altogether discount was given for 7,644,208 liras, direct loans to agriculturists amounted to 271,617 liras and direct discount to intermediary institutions to 4,018,818 liras.

In spite of the difficulties of the money market the rate of interest of the preceding year — $3\frac{1}{2}$ per cent. — remained unaltered for the rediscount and direct discount concluded with intermediary institutions, and the rate of 4 per cent. for operations with agriculturists directly. The intermediary institutions imposed rates of interest varying from 4 to 6 per cent. but most usually 5 and $5\frac{1}{2}$ per cent.

Operations of rediscount and direct loans were distributed as follows according to their objects :

1) *Loans enjoying a legal privilege :*

on the harvest	number	128	liras	48,798.65
" crops		6,599	"	2,757,550.55
" seeds		2,487	"	777,582.72
" manures		3,223	"	659,140.58
" fertilizers		2,700	"	605,427.63
" food of settlers		135	"	14,605.93
" food of labourers		—	"	—
various		2,061	"	997,829.08
	number	17,333	liras	5,860,935.14

2) *Loans not secured by a privilege :*

on cattle	number	2,370	liras	1,578,106.38
" small live stock		339	"	83,566.48
" machinery		193	"	142,047.60
" agricultural impleménts		181	"	36,753.49
" stock other than live stock.		98	"	29,568.12
various		1	"	315.25
	number	3,182	liras	1,870,357.32

3) *Loans secured by pledged deposited agricultural products :*

by cereals	19	liras	184,533
" wine	—	"	—
" almonds	—	"	—
	<hr/>		<hr/>
number	19	liras	184,533

The loans enjoying a legal privilege represent 74.04 per cent. of the total credit afforded to agriculturists ; those not secured by a privilege 23.62 per cent. ; and those secured by deposited agricultural products 2.34 per cent.

Of the loans 13,393 for 5,310,916.87 liras were granted to landowning farmers ; 5,903 for 2,305,848.24 liras to tenants ; 671 for 139,263.99 to holders of long leases ; and 567 for 159,796.36 liras to *métayers* and cultivators receiving a share of profits.

As regards the distribution of credit it is enough to note that of 21,161 loans 7,034 were of less than 100 liras, 9,611 of sums between 100 and 500 liras, and 3,122 of sums between 500 and 1000 liras ; so that 93 per cent. of the total number of loans and about 49 per cent. of their total amount were accounted for by operations covering less than 1000 liras.

Of operations of direct discount with intermediary institutions 335 for 2,666,544 liras were for the collective acquisition of materials useful to agriculture, 20 for 633,700 liras were for collective sales of agricultural products, and 272 for 718,572 liras were to supply the deficiency of resources of their own from which intermediary institutions suffered. Applications for such discount came almost always from agricultural consortia and agricultural and rural funds.

Altogether in 1916 the savings-bank of the *Banco di Napoli* distributed credit as follows among the various provinces :

Credit obtained by each Province in 1916.

Province	Liras
Bari	1,594,553.44
Salerno	1,502,632.97
Caserta	1,497,557.03
Teramo	1,199,949.61
Foggia	1,166,814.80
Aquila	973,720.73
Lecce	742,354.08
Campobasso	653,480.56
Reggio Calabria	550,698.00
Sassari	488,188.06
Benevento	359,329.38
Avellino	345,886.40
Chieti	245,876.01
Cagliari	221,355.64
Catanzaro	177,041.75
Naples	138,617.13
Cosenza	69,087.00
Potenza	7,500.06
	<hr/>
	11,934,642.66

In its fifteen years of activity the agricultural credit of the savings-bank of the *Banco di Napoli* has distributed in the Southern and Sardinian provinces the remarkable sum of 102,805,000 liras. Of this sum only 2,740,064 liras are accounted for by loans to agriculturists, the remainder

having been distributed, as the law prefers, by the means of local institutions, especially agricultural consortia.

The general movement of credit in the period indicated can be specified as follows: rediscount to intermediary institutions 77,360,834.16 liras; direct loans to agriculturists 2,740,064.21 liras; direct discount to intermediary institutions 22,704,684.97 liras.

§ 3. THE EXERCISE OF AGRICULTURAL CREDIT BY THE SAVINGS-BANK OF THE "BANCO DI NAPOLI" WITH STATE FUNDS UNDER THE DECREE OF 27 JULY 1916.

The transactions with which the preceding part of this article has dealt represent *ordinary* credit, that is credit exercised by the savings banks of the *Banco di Napoli* for every crop and every province mentioned above, on the basis of the laws of 7 July 1901, no. 334, and 2 February 1911, no. 70. In 1916 however, in virtue of a lieutenant's decree of 27 July of that year (no. 913), the savings bank of the *Banco di Napoli* was authorized to exercise, with funds advanced by the State, *extraordinary* credit for the growing of cereals only, in the provinces of Foggia, Bari and Campobasso, which had suffered serious loss by the failure of harvests for three years and an invasion of field-mice. The sum placed at the disposal of the Treasury for these three provinces, and also for the province of Potenza which was in an analogous condition, amounted altogether to 20,000,000 liras (1). According to the aforesaid decree this sum was to be employed on subventions, paying interest at the rate of 2 per cent., to provide seeds, fodder for live stock and the expenses of cultivation at the rate of not more than 200 liras for every hectare (2) to be sown. Such subventions could be made: a) to landowners and holders of long leases cultivating their lands directly and having a taxable income amounting to no more than 5000 liras; b) to farmers bound by any sort of contract. The subventions are granted directly to applicants whenever and wherever they cannot be granted by the medium of intermediary institutions.

According to an investigation of the Ministry of Agriculture the aforesaid sum of 20,000,000 liras was, after the number of the affected communes and the importance of their losses had been taken into account, distributed as follows among the provinces affected:

		Liras
Province of	Foggia	12,700,000
" "	Bari	4,300,000
" "	Campobasso	1,000,000
" "	Potenza.	2,000,000
		<hr/>
		20,000,000

(1) By the decree of 6 May 1917, no. 737, other eight million liras were assigned to the expenses of the harvest.

(2) 1 hectare = 2.47 acres.

The sum of 2,000,000 liras thus destined for Potenza, increased by 250,000 liras taken from the sum destined for Bari, was paid in several instalments, according to the requests made, into the provincial fund for agricultural credit for Basilicata which was entrusted with its employment conformably to the aforementioned decree. The operations having reference to the other provinces, Foggia, Bari and Campobasso, were entrusted to the respective provincial funds, administered, as is known, by the savings-bank of the *Banco di Napoli*.

The agriculturists of these three districts made to this savings bank 10,588 applications for a total sum of 17,344,562 liras, in response to which loans were granted amounting on 31 December 1916 to 13,729,927 liras. Of this sum direct loans (of 8,680,063 liras) constituted 63.22 per cent., and rediscounts (5,049,863 liras) — that is loans by the medium of institutions — constituted 36.78 per cent.

By means of the agricultural consortia, 3,239,338 liras were distributed; by means of the agricultural and rural funds 985,616 liras; by means of the funds for agricultural loans 316,235 liras; and by means of the popular banks 508,673 liras. The first place is, as always, occupied by the agricultural consortia.

According to the form and objects of these loans the aforementioned sum of 13,729,927.24 liras was distributed as follows:

				Liras
				—
subventions in money	number of loans	13,865		6,421,347.26
" " kind	" " "	7,622		7,308,579.24
				<hr/>
	total loans	21,487		13,729,926.50

Of the total sum of loans 46.76 per cent. was constituted by those in money and 53.24 per cent. by those in kind. To landowners 3,844,409 liras were conceded, to holders of long leases 110,519 liras, to *métayers* and cultivators receiving a share of profits 187,371 liras, to tenants having short leases 9,587,626 liras.

Contrary to what is found to be true of ordinary operations of agricultural credit, in which a higher percentage is accounted for by landowners than by borrowers of the three other categories, tenants having short leases here predominate, receiving 69.80 per cent. of the whole sum of State capital distributed.

The three provinces received altogether — Foggia 10,230,300 liras; Bari 2,696,764 liras; and Campobasso 802,862 liras.

§ 4. THE DEPARTMENT OF AGRICULTURAL CREDIT IN THE "BANCO DI SICILIA".

The Intermediary Institutions. — As appears in the bank's report the institutions admitted to credit on 31 December 1916 numbered 324 and their own capital amounted to 3,304,111 liras. They comprised 46,648 members with a total presumed capital of 217,035,845 liras. Of these institutions 304 had the form of co-operative societies, and of such 264 were nominally collective, 37 had limited liability and 3 were limited joint-stock companies. Twenty were legal corporations. The institutions were distributed as follows among the seven provinces of the island: Girgenti 64, Palermo 56, Catania 50, Caltanissetta 49, Trapani 47, Syracuse 30, and Messina 28. According to their nature they can be classified as follows:

Co-operative agricultural societies of production and labour	134
Agricultural funds { Societies	83
{ Civil persons	8
Agricultural consortia	18
Rural funds	46
<i>Monti frumentari</i>	11
Agricultural banks	13
Popular banks	4
Agricultural societies	7

Of these societies thus accredited by the bank 37 lease collectively a total area of 28,809.4854 hectares.

In 1916 as previously the society exercised caution in accrediting institutions, wishing better to guarantee the credit conceded. The total credit enjoyed by the institutions amounted to 15,178,000 liras.

It is interesting to notice that 190 of the 357 communes of the island contained at the end of 1916 institutions admitted to credit, while 167 were without them. Each of 109 communes contained one of such institutions and the others more than one — one had as many as 12.

In 1916 these institutions were as always carefully watched: 130 inspections took place and in the large majority of cases discovered that the institutions were working normally.

The Operations Effected. — In 1916 the department effected 24,575 operations for 7,792,580 liras. Of them 24,525 for 7,587,080 liras depended on operations concluded with or by the medium of intermediary institutions. The others were concluded with individuals directly.

The operations concluded as follows among the various provinces: Palermo 1,847, 313.59 liras; Girgenti 1,222,177.21 liras; Trapani 1,092,528.38 liras; Syracuse 1,703,445.56 liras; Caltagirone 975,500.39 liras; Caltanissetta 814,975.36 liras; Messina 430,486.24 liras; Catania 336,153.87 liras.

As regards its aim the discount granted in 1916 was distributed as follows :

For seeds, manures, fertilizers, crops and harvest	Number 24,163 for	5,913,329 liras
For machinery, agricultural imple- ments and live and other stock	" 175 "	147,756 "
Direct discount to intermediary institutions	" 237 "	1,731,495 "

In accordance with the classes of the borrowers and with the various crops operations were distributed as appears in the following Tables I and II.

In 1916 the rate of interest remained at $4 \frac{1}{4}$ per cent. for operations of discount and rediscount by the department, and consequently the maximum rate which intermediary institutions could charge to borrowers remained at $6 \frac{1}{4}$ per cent.

TABLE I. --- *Classification of operations according to the classes of the borrowers.*

Establishments at	Landowners		Holders of long leases		Mortgages		Holders of short leases		Total	
	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras
Palermo	3,111	862,845.63	98	21,311.00	137	24,457.60	853	296,475.47	4,199	1,204,889.70
Messina	758	292,048.89	1	168.00	43	10,293.00	51	20,392.60	853	322,902.49
Catania	413	108,155.82	1	1,000.00	111	21,419.20	263	54,128.85	788	184,703.87
Girgenti	1,415	391,962.53	20	5,096.60	445	91,612.34	1,623	502,059.64	3,503	990,731.11
Trapani	650	175,398.54	23	9,190.00	72	11,087.00	3,186	593,497.22	3,931	789,172.76
Syracuse	989	400,873.21	1,076	225,846.35	211	45,442.40	2,082	310,641.05	4,358	982,803.01
Caltanissetta	1,209	237,069.60	49	10,225.90	460	72,304.00	2,008	406,226.81	3,726	725,826.31
Caltagirone	1,672	518,185.75	13	1,320.00	95	14,300.10	1,200	326,250.45	2,980	860,056.30
Total	10,217	2,986,539.97	1,281	274,157.85	1,574	290,915.64	11,266	2,509,472.09	24,338	6,061,085.55

(a) In addition 237 bills for a sum of 1,731,495.05 liras were discounted to the institutions directly for various objects.

TABLE II. — *Classification of the operations according to the various crops.*

Etablissements at	Sown lands		Vines		Citrus plantations		Olive-tree plantations		Various crops		Total	
	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras
Palermo	533	147,846.17	1,269	253,462.52	1,791	667,911.34	315	86,191.37	291	40,478.30	4,199	1,204,889.70
Messina	123	57,412.52	284	89,035.10	272	126,804.10	111	24,317.44	63	25,333.33	853	322,902.49
Catania	441	88,402.24	154	25,330.00	13	4,465.60	7	1,608.45	173	64,897.58	788	184,703.87
Girgenti	2,372	650,974.76	346	115,581.00	18	6,175.00	31	9,657.30	736	208,343.05	3,503	990,731.11
Trapani	2,767	482,693.13	685	205,912.80	—	—	2	500.00	477	100,066.83	3,931	789,172.76
Syracuse	590	228,903.96	3,091	475,114.30	276	181,635.00	12	3,000.00	389	94,149.75	4,358	982,803.01
Caltanissetta	3,115	572,793.01	428	100,522.10	—	—	4	1,010.00	179	51,501.20	3,726	725,826.31
Caltagirone	2,120	598,174.45	744	190,333.40	75	41,474.10	—	—	41	30,074.35	2,980	860,056.30
Total	12,061	2,827,200.24	7,001	1,455,291.22	2,445	1,028,465.14	482	126,284.56	2,349	623,844.39	24,338	6,061,085.55 (a)

(a) In addition 237 bills for 1,731,495.05 liras were discounted to the institutions directly.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE NATIONAL MORTGAGE BANK, — *Banque hypothécaire nationale. Rapport sur les opérations de l'année 1915.* 52 pp. Comi brothers, Buenos Ayres, 1916.

The report of this bank on the year 1915 shows first of all that in this year it filled only a purely administrative role. The disturbances caused by the European war, and the great difficulties which the course of finances and economics throughout the world has consequently encountered, have obliged the bank to delay all new issues of mortgage bonds until the various markets are able to offer conditions as profitable as those which formerly prevailed to new securities.

The National Mortgage Bank has devoted itself especially to a study of the money markets, and has at the same time scrupulously watched over the numerous mortgage loans represented by the paper it holds.

The report shows that in 1915 the Argentine mortgage bond was sought after, in the markets for securities both in the Argentine and elsewhere, as a safe and stable income-producing security. This is natural where Argentine savings are concerned, for the investment is sufficiently remunerative, bringing in from 5 to 6 per cent. The security is attractive even to large capital for it can at any time be converted into cash, so active is the business in the bonds.

There is nothing abnormal in their movement during 1915. Such of them as emanated from Europe, as a consequence of the war, represent only a very small amount as compared with the 300,000,000 pesos (1) estimated to be thus invested in Europe.

The bank's business is characterized by nothing further of particular interest. In this year no new loan was made in the form of mortgage bonds; 39 loans were made in specie for the execution of works on private properties and they represented a sum of 45,680 pesos; 34 loans for 59,680 pesos were made in the federal capital, and 5 for 6,000 pesos in the provinces.

On 31 December 1915 there were in force 29,397 loans for a total value of 577,483,631 pesos. As regards interest the loans of preceding years were distributed as follows:

	Number	Amount — pesos	Interest due — pesos
Regular loans	18,778	330,859,496	—
Loans on which interest for 1 half-year is due	4,618	87,089,145	3,503,283.75
" " " " " 2 half-years "	2,685	62,355,420	5,007,872.50
" " " " " more than 2 "	3,258	96,962,570	7,577,205.50
Total . . .	29,339	577,266,631	26,088,360.75

(1) 1 peso = about 45 at par.

The following are some data as to the bank's circulation and issue and the average value of mortgage bonds in the five years from 1911 to 1915:

Year	Circulation on 31 December pesos	Issue		Average value per cent.	Loans in force on 31 December pesos
		Series	Amount pesos		
1911	336,662,700	C. H. A. 6 %	115,926,600	99.87	377,071,351
1912	442,538,175	C. H. A. 6 %	140,647,900	97.36	485,324,126
1913	499,426,600	C. H. A. 6 %	91,062,700	97.42	552,713,562
1914	535,162,850	2nd l. 9155, 1st series	49,926,300	87.44	586,629,145
1915	520,297,100	—	—	90.37	575,572,840

The reserve fund of the Mortgage Bank amounted on 31 December 1915 to 37,670,603.30 pesos, and the reserve intended for the concession of loans to 11,204,727.07 pesos.

GERMANY.

1. THE CONSOLIDATION OF PROPERTY IN PRUSSIA. — Dr. Jur. Albert Dietrich: *Der Weg der Besitzfestigung. Jahrbuch der Bodenreform.* Jena, Gustav Fischer, 21 June 1917.

Two years after the *Besitzfestigungsgesetz* (Consolidation of Property Law) had come into force, that is when it was possible to perceive its first results, we explained that while it would strengthen the policy of interior colonization it would at the same time solve the problem of emancipating land from mortgages (1). It was therefore logical that it should first be applied in the districts in which property was most mortgaged; and such was the course followed. The task was first undertaken in Posnanian and West Prussia; and then — thanks to the action of the *Ostpreussische Landgesellschaft* (East Prussian Land Society), the *Pommersche* (Pomeranian) *Landgesellschaft* and the *Schleswig-Holsteinsche Höfebank* (Schleswig Holstein Courts' Bank) — in Pomerania, Silesia and Schleswig-Holstein. The development of this enterprise is interesting to follow, for the consolidation of property cannot fail to have a good effect, from the point of view of agriculture, in the districts where it is realized.

The parts of Prussia specified in the programme, by the ruling of 12 March 1913, are also those to which, as well as to Posnanian and West Prussia, the law of 26 June 1912 was progressively applied. They are:

East Prussia :

District of government of Königsberg, circle of Rastenberg.

District of government of Gumbinnen, circles of Angerburg, Goldap, and Oletzko.

District of government of Allenstein, all circles.

(1) See our issue for August 1914, *Bulletin of Economic and Social Institutions*, Vol. XLIV, 5th year, No. 8, pp. 85 et seq.

Pomerania :

District of government of Köslin, circles of Bütow, Lauenburg ; in the provincial circle of Stolp the administrative districts of Bochowke, Gross-Nossin, Kose, Mickrow, Schworz-Damerkow and Wündichow.

Silesia :

District of government of Liegnitz, circle of Freystadt, town and provincial circle of Glogau, circles of Grünberg, Lüben, Sagan and Sprottau. District of government of Breslau, circles of Gross-Watensleben, Guhrau, Militsch, Namslau ; in the circle of Öls the administrative districts of Briese, Gross-Graben Pontwitz, Stronn, Ulbersdorf ; circle of Steinau ; circle of Trebnitz except administrative district of Bischwitz, of Hennigsdorf, of Hühnern, of Kapsdorf, of Schebitz, of Wohlau.

District of government of Oppeln except circles of Grottkau and Leobschütz and the town and provincial district of Neisse.

Schleswig-Holstein :

District of government of Schleswig, circles of Hadersleben, Apenrade, Sonderburg, Flensburg ; administrative districts of Born, Haude Witt, Harrislee, Oeversee ; circle of Tondern ; administrative districts of Abel, Ballum, Brede, Bilderup, Buhrkall, Döstrup, Emmerleff, Hostrup, Klixbüll, Ladelund, Medelby. Mögeltondern, Neukirchen, Norderlütgum, Osterhoist, Rackstedt, Röm, Ruttebüllerkoog, Süderlütgum, Tingleff, Wiesby, the places said to be of Horzer and of Lügumkloster, and the district and town of Tondern.

In these places, as in Posnania and East Prussia, it is provincial societies for interior colonization who are responsible for the consolidation of property ; and they are helped by the State, the province, public communal and other organizations and co-operative organizations. The following figures show the part of the capital of the four land societies, already named, which is thus contributed by organizations :

Names of Societies	Capital of Societies marks	Of States marks	Shares of public communal and other organizations marks	Of co-operative and other organizations marks
Ostpreussische Landgesellschaft	7,651,000	4,000,000	3,200,000	451,000
Pommersche Landgesellschaft	6,250,000	3,250,000	2,448,000	552,000
Schlesische Landgesellschaft	5,550,000	2,750,000	1,500,000	1,250,000
Schleswig - Holsteinische Landgesellschaft	1,000,000	600,000	25,000	375,000

The role thus incumbent on co-operative organizations seems to have been at first relatively small, but there is reason to believe that it must necessarily increase.

Their task is recognized to be that of seeking, even outside the limits of the plan dictated by the law on the consolidation of property, to bring about within their spheres the emancipation of agricultural property from mortgages.

These united efforts were first exercised in Posnania and West Prussia between 1905 and 1906, some years before the law on the consolidation of property was promulgated. In 1913 they spread to the four other provinces. On 31 December 1916 they had yielded appreciable results, expressed by the following figures :

Provinces	Date at which the procedure for consolidation was first applied	Peasants' Properties		Large Properties		Properties subject to the <i>Verschuldungsgrenze</i>		Total area
		Number	Area	Number	Area	Number	Area	
		—	hectares	—	hectares	—	hectares	hectares
Posnania. . .	1905	5,912	97,922	88	55,204	47	29,865	153,126
West Prussia .	1906	5,354	118,580	159	66,023	22	11,412	184,603
East Prussia .	1913	12	1,696	3	1,143	—	—	2,839
Pomerania . .	1913	179	6,044	12	6,911	7	4,562	12,955
Silesia	1913	269	6,288	30	12,275	9	9,893	18,563
Schleswig Holstein . . .	1913	359	10,726	7	1,592	6	1,217	12,318

These figures show us that of the provisions regarding interior colonization, the consolidation of property and emancipation from mortgages, one is relatively important, that namely which imposes the *Verschuldungsgrenze*. This is a maximum limit to mortgage debts on land employed for purposes of agriculture or forestry. It was established by the law of 20 August 1906 and was intended to reduce mortgage burdens, it being argued logically that the first step towards lessening these burdens should be an effort to limit their growth. The result thus obtained is the more interesting because this limitation of mortgage burdens may be said to be optional, since the provision fixing a maximum charge cannot be registered in the land books except at the request of the proprietor.

But while obtaining that about 15 per cent. of the consolidated properties were subject to a limitation on their future burdens, a disburdening was at the same time also effected in the shape of a real diminution of charges, as will be seen from the following data, in which these charges in the five or six provinces (1) contemplated are compared as regards their state before the law on consolidation was promulgated and its subsequent modification.

(1) The data for East Prussia are lacking.

	Before the consolidation of the property				After the consolidation of the property				Reduction	
	Interest — marks	Amortization quota — marks	Annual charges — marks	Interest — marks	Amortization quota — marks	Annual charges — marks	Of annual charges — marks	%	Of interest — marks	%
Pomerania { Peasants' properties	4,244,200	94,900	4,339,100	3,309,600	554,400	3,864,000	475,100	10.9	934,600	22.02
Large properties	2,089,680	113,970	2,203,650	1,782,290	318,290	2,100,580	103,070	4.7	307,390	19.4
West Prussia { Peasants' properties	6,609,555	174,307	6,783,862	5,321,750	781,980	6,103,730	680,132	10.03	1,287,805	19.3
Large properties	2,980,265	126,192	3,106,457	2,613,213	455,105	3,068,318	38,139	1.2	367,052	12.3
Pomerania { Peasants' properties	269,137	3,235	272,372	223,715	29,383	253,098	19,274	7.15	45,422	16.87
Large properties	273,522	14,612	288,134	229,229	39,264	268,493	19,641	6.8	44,293	16.2
Silesia { Peasants' properties	340,402	10,512	350,914	306,617	39,448	346,067	4,847	1.39	33,783	9.9
Large properties	538,158	41,306	579,464	499,705	97,963	597,668	—	—	38,453	7.1
Schleswig-Holstein { Peasants' properties	516,535	23,521	540,056	432,547	68,522	501,069	38,987	7.22	83,988	16.26
Large properties	106,178	6,986	113,164	88,326	17,902	106,228	6,936	6.13	17,852	16.81

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2. THE PROROGATION OF MORTGAGE DEBTS FROM 31 JULY 1914 TO 31 DECEMBER 1916. — *Verlängerung im Kriege fällig gewordener Hypotheken.* — *Bankarchiv*, 1 February 1916 and 1 May 1917.

At the beginning of the present war, on 7 August 1914, Germany decreed a legal moratorium affecting all private credit. The courts were authorized to grant to debtors a prorogation for three months of the date on which payments fell due, if the step were justified by their economic circumstances.

Later, on 22 December 1914 and 8 June 1916, decrees were voted which concerned especially the prolongation of the period allowed for the payment of mortgage debts. These decrees authorize the courts to grant such prorogation to mortgage debtors on the following conditions (art. 1):

- 1) that the debtor's economic position justify the grant ;
- 2) that the debtor have shown himself worthy of the privilege by his punctual payments before the war ;
- 3) that the creditor suffer no extreme disadvantage.

The prorogation is granted by means of a sentence or a legal decision (art. 1 and 4).

For the principal debt, that is the capital, the delay is for twelve months, after which the courts are authorized to grant a new prorogation for twelve months, similarly renewable. Where interest is concerned the prorogation is for six months only and cannot be renewed (art. 2 and 5).

Besides this legal moratorium there is a moratorium by contract: that it so say the date of payment may be prorogued by a contract between a debtor and a creditor. In the case of debts other than mortgage debts the contracting parties may come to a free agreement as to the terms of such a contract ; but in the case of mortgage debts these terms must follow an agreement made among the German mortgage banks which belong to the Central Association of German Banks and Bankers. This agreement was concluded on 1 February 1916 and signed by twenty-seven German mortgage banks. The ten remaining mortgage banks granted prorogation to their debtors in accordance with the terms of this agreement, in spite of the fact that they did not sign it.

The terms of the agreement are as follows :

1. The mortgage banks are bound to grant a prorogation of the date of payment to their members, even if such is not granted by the courts.
2. The prorogation is for a longer or shorter period — six months to ten years.
3. In granting it the creditor bank may not exact either too high a rate of interest or an excessive commission.
4. These provisions do not apply to debts contracted during the war, in the case of which creditors need not grant a prorogation, or may grant it on conditions other than those which have been set out.

The special committee of the Central Association of German Banks and Bankers presented to the sub-secretary of the Ministry of Interior Affairs a report on the results of those prorogations of the terms of mortgage loans which were made in accordance with the terms of the aforesaid agreement. We borrow from this report (1) its most important data.

These data are supplied by twenty-nine mortgage banks and show what prorogations were granted by them from the beginning of the war until 31 December 1916.

Altogether 22,196 prorogations were granted but the report is concerned with only 22,072, so that the conditions of 124 are not indicated. Out of these 22,072 prorogations.

12,385 were for a period of 10 years ;
 6,255 " " " " " less than 10 years ; and
 3,432 " " an indeterminate period.

The rate of interest stipulated was :

4 $\frac{1}{2}$	per cent. in the case of	12,866	prorogations
from 4 $\frac{1}{2}$ to 4 $\frac{3}{4}$	" " " " " "	7,654	"
" 4 $\frac{3}{4}$ to 5	" " " " " "	1,477	"
more than 5	" " " " " "	75	"

11,319 prorogations were granted without any obligation on the debtors to pay any due to the creditors ; and for the remaining 10,753 prorogations the debtors paid a due varying from $\frac{1}{2}$ to 3 per cent.

The following table gives the details of the operations :

(1) *Bank Archiv*, 16th year, No. 15.

PROROGATIONS.

		Prorogations		
		for 10 years	for less than 10 years	for an indeterminate period
<i>Interest 4 1/2 %:</i>				
special dues	0 %	606	3,262	3,253
»	1/2 %	894	134	1
»	1 %	2,998	69	31
»	1 1/2 %	1,307	11	7
»	2 %	198	—	—
»	more than 2 %	95	—	—
Total . . .		6,098	3,476	3,292
<i>Interest from 4 1/2 to 4 3/4 %:</i>				
special dues	0 %	1,361	1,292	82
»	1/2 %	365	20	—
»	1 %	2,760	33	—
»	1 1/2 %	1,152	3	—
»	2 %	574	2	—
»	more than 2 %	10	—	—
Total . . .		6,222	1,350	82
<i>Interest from 4 3/4 to 5 %:</i>				
special dues	0 %	27	1,264	58
»	1/2 %	12	61	—
»	1 %	16	29	—
»	1 1/2 %	3	—	—
»	2 %	5	1	—
»	more than 2 %	1	—	—
Total . . .		64	1,355	58
<i>Interest at more than 5 %:</i>				
special dues	0 %	1	74	—
»	1/2 %	—	—	—
»	1 %	—	—	—
»	1 1/2 %	—	—	—
»	2 %	—	—	—
»	more than 2 %	—	—	—
Total . . .		1	74	3,432
General total . . .		12,385	6,255	3,432
		22,072		

Part IV: Agricultural Economy in General

UNITED STATES.

INTERIOR COLONIZATION IN CALIFORNIA.

OFFICIAL SOURCE:

REPORT OF THE COMMISSION ON LAND COLONIZATION AND RURAL CREDITS OF THE STATE OF CALIFORNIA, November 29, 1916. California State Printing Office, Sacramento, 1916.

The legislature of California in 1915 passed a law providing for a commission to "investigate and consider the question of land colonization, and the various forms of land banks, co-operative credit unions and other rural credit systems adopted or proposed in this country or elsewhere, with especial view to the needs of the rural communities of this State".

Since 1910 questions of land tenure have assumed a hitherto unthought of importance in the United States. The causes for this are the disappearance of free, fertile public lands, the rising prices of privately owned farm lands, the increase of tenant farming, and the growing attractions of city life which lead young people to leave the farms.

The State of California has had no State land settlement policy but has left the matter entirely to unregulated private enterprise. There has been no public control of the selection of colonists, and no public scrutiny of the soil and conditions of purchase.

The task of the commission has been to study the methods and results of private colonization in California in recent years, and compare them with those found in other countries in which colonization is helped and directed by the State. The endeavour has been to get as much firsthand information as possible. Statements have been obtained from many settlers in nearly all parts of the State in which colonization has recently been active. Conferences with men active in matters of colonization and with interested commercial bodies have been held (1).

(1) While this investigation was in progress Congress passed the Federal Farm Loan Act. It seemed desirable therefore that the investigation should deal with methods and policies of land settlement. The benefits of the Federal Farm Loan Act are however restricted to farmers who can give first mortgage security on land worth double the amount of the loan they obtain. In order to enable tenant farmers to become owners of farms or to give adequate assistance to colonists without much capital a separate credit system must be provided. Hence the Crosser Bill.

The results of the commission's investigations have been arranged in a report, published in 1916, which we will analyse in detail (1).

§ 1. AGRICULTURAL CONDITIONS IN CALIFORNIA.

California has an immense area of fertile and unpeopled land. Only eleven million out of the twenty-eight million acres of farm land are being cultivated. Nevertheless comparatively few settlers are immigrating and many who arrived in recent years have gone away. Costly advertising and still more costly personal solicitations have failed to attract colonists. The principal causes for this arrested development seem to be the high prices of land, the high rates of interest, and the short terms which colonization contracts allow for payment. Moreover great properties, owned by nonresidents, ought to be subdivided and cultivated by residents. 310 landed proprietors own more than four million acres of land suited to intensive cultivation and capable of supporting a dense population.

The enquiry obtained the following data as to the financial condition of settlers :

Number of settlers interviewed 991 ; average area of a farm 37 acres ; average price paid for unimproved land \$ 160 (minimum \$ 56 and maximum \$ 512) ; average time allowed for payment 5.8 years ; average capital of settler \$ 4,814 ; average cost of improvements \$ 2,367 (minimum \$ 850 and maximum \$ 6,615) ; number of colonists still debtors 719 ; average amount of indebtedness \$ 2,931 ; average rate of interest 8 per cent. when money is furnished by a bank or privately, 6.9 per cent, when it is furnished by contract.

In the whole of California the rate of interest on deferred payments for land and money borrowed to pay for land or its improvement or stocking varies from 6 to 10 per. cent., and the time allowed for repayment from three to eight years.

The following table shows the average price per acre in 1916 of farm land in the United States.

Geographical Division	Improved Lands	Unimproved Lands
	\$	\$
North Atlantic States	64.30	38.71
South Atlantic States	38.02	23.79
North Central east of Mississippi River	100.67	74.95
North Central west of Mississippi River	78.21	59.68
South Central	33.38	24.09
Far West	102.58	58.40
California	180.00	110.00

(1) In our issue for April 1917 we published a brief notice of this report.

As regards the prices paid by colonists in California for their lands these averaged according to their own statements \$ 190.72 an acre, according to the statements of the commercial bodies in the State \$ 260.97 an acre. The purchase price of unimproved land is, in fact, higher in California than in other parts of the United States or in countries which have a State system of land settlement.

The comparison of the price of land and conditions of land purchase in California with those obtaining elsewhere makes it seem wonderful that settlers in California pay for farms in from three to ten years while in other countries it takes them from thirty to seventy-five years to do so. The explanation is that in California the settler who has not had a large capital in cash or some outside income has not been able to buy a farm at all.

The experience of practically every colonizing company, no matter how successful, shows that it would have been better, both for the settlers and for the company, if the original enterprise had been organized on a basis which gave the settlers more money for improvements and a longer time in which to pay for their farms. The colony of Los Molinos, for example, is now a success. A majority of the settlers have overcome the obstacles which at first threatened to overwhelm them. They bargained to pay a high price for unimproved land in the short period of seven years. In addition to paying for the land they had to find money for improvements and stock, of which the cost on small irrigated farms is very heavy. The working expenses included taxes of about \$3 an acre, water charges of \$2 an acre, and interest on land of which the amount varied from \$75 to \$300 an acre. A sum between \$35 and \$40 an acre was needed in order to pay interest, principal and taxes; and at the outset the land did not produce anything approaching this amount. Fortunately the company which founded the colony had financial resources which enabled it to help the settlers by spending \$60,000 on the purchase of cows, and allowing the settlers to pay for these by subsequently ceding half the money due to them for cream. Each settler paid 8 per cent. on the loan made to him. The following figures show the extent to which the settlers were still indebted in 1916. The 375 contracts then outstanding represented:

\$ 48,763 arrears of interest,
651,001 arrears of principal,
15,689 ledger account, and
13,446 unpaid balance on purchase of cows.

In the past men paid for land in California in five years: but the task of paying for a farm out of its products has become much harder in the last ten years. Thus when colonization began in Orland the price of land was from \$10 to \$40 an acre. The same land, unimproved, now sells for from \$75 to \$150 an acre and the water right costs an additional \$40 an acre. The lands of the Sacramento Valley Irrigation Company were bought at an average price of \$37 an acre; but the settlers on them whom the commis-

sion interviewed paid an average price of \$130 an acre, which price included only part of the cost of necessary works of irrigation. The early settlers in Modesto and the Oakdale districts bought land for less than \$50 an acre; but land of the same kind in these districts now sells for \$100 and \$150 an acre, in some cases for \$250 and \$300 an acre.

In fact, throughout the area of colonization the price of land has been multiplied by from two to ten, while the profits of farming have increased little if at all. Hence some years ago men who bought land at \$50 an acre could pay high interest and also free themselves from debt, while those who have bought recently have to struggle even to pay interest.

The higher prices of land have made intensive cultivation necessary, and this entails costlier improvements and equipment. The investigation of the United States census showed that while the average area of a farm diminished between 1900 and 1910, the average capital invested in it increased by 86 per cent.

The average cost of improvement and equipment also increases as the size of the farm diminishes. Even if the cost of a house and stable on a twenty acre farm is no more than it used to be on a farm of 160 acres, its average cost per acre is about eight times as great.

The estimates made by the commercial organizations show that the ultimate cost of improvements on the small intensively cultivated farms averages \$180 an acre.

The short time given in which to pay for land in most contracts of colonization implies a profit following on cultivation of between 20 and 25 per cent. of the cost of land and equipment. Such profits are occasionally made but they are not the rule. Investigations of the United States Department of Agriculture shows that the fully improved farm rarely pays more than 5 per cent. on the investment; if reasonable allowance be made for the wages of the farmer and his family.

The United States Reclamation Service has kept a careful census of the yield and value of crops grown under federal projects. It reports the following as the average values of crops: \$31 an acre in 1910, \$27 an acre in 1911, \$26.60 an acre in 1912, and \$24.50 in 1913. The reductions are mainly due to the declining prices of products, and prices for the last two years are higher. The total area cultivated under various projects, namely 1,364,149.9 acres (of which 703,424 were cultivated under government reclamation projects) was found to yield a crop worth, on an average, only \$23.45 an acre.

In all districts exceptional single farms and single acres yielded far more than the average returns. For example single acres in Orland planted with citrus fruits have brought in \$249 each, and single acres planted with small fruits \$252 each. Single acres devoted to truck farming in Californian colonies have brought in more than \$100 each. But plans for payment for colonists' farms should of course be based not on exceptional instances but on averages.

The United States census gave \$43.50 an acre as the gross value of crops grown on irrigated land in California, but beginners cannot expect

to reach this average because the calculation covered the highly improved orchards and vineyards in full bearing. Alfalfa crops, which are the beginner's main dependence, had an average value of only \$22.94 an acre. Even in such industries as the growing of citrus fruits, which need a large investment in land, a long wait for returns, and exceptionally skilful and careful cultivation and marketing, the net profits over and above expenses of cultivation only average, according to a report prepared by the California Citrus Growers' Association, 4.3 per cent. on land valued at \$1,000 an acre.

Real estate agents from the overdone and less profitable fields of the Middle West flocked to California, not to develop agriculture but to exploit it. The prosperity of the settler was his own affair. The land agent's business was to make money out of him rather than to make money for him.

One agency bought about 150,000 acres at an average price of less than \$40 an acre. The average selling price was at first about \$75 but was afterwards raised to \$175 an acre. The agent's commission at the higher price was 30 per cent., so that he was paid for selling the land considerably more than it cost. On another colony an Eastern selling agency undertook to dispose of land for a commission of 20 per cent. on the selling price. No limit was placed on the price the agent could ask, so the price of farms which has been selling at \$150 an acre was raised to \$400 an acre and the agents thereby almost doubled their commissions. As by the terms of the sale one fifth of the price was paid in cash and the balance in four yearly instalments, the selling agent took all the first payment and sought to induce the settler to buy enough land to absorb all his capital in first payments. He then could pocket the whole as his commission. When the whole projected area had been sold the owner held contracts with a number of moneyless, inexperienced people who were a liability rather than an asset, while the selling agent had all the cash. It is no wonder that a manager of colonization enterprises testified to the commission that in most cases the price of land was two or three hundred per cent. higher than it should be.

The underlying causes for much of the failure of the colonizing schemes are: 1) the selection of unfit land; 2) the selection of unfit settlers; 3) ignorance, on the part of the promoters, of proper colonizing methods, and, on that of the settlers, of the crops they should grow and how and when they should plant them; 4) the excessive cost of land; 5) the insufficient capital of the settlers; 6) the excessive rates of interest on borrowed money and deferred payments; 7) the short terms allowed for payment; and 8) improper marketing facilities.

§ 2. CONCLUSIONS AND RECOMMENDATIONS.

After having made a detailed exposition of the position of agriculture in California, and having noticed all the disadvantages and abuses due to the complete liberty left to individuals as regards colonization, the commission advances, in the last part of its report, its conclusions and recommendations on which legislation should be based.

In the first place the commission considers that the State should have a land settlement policy and deal with this matter as a public problem.

In the greater part of the United States there has been little need for public supervision of rural development. The kind of crops which can be grown and the preliminary outlay they require are so restricted that little variation in methods is possible. It is otherwise in California. There much of the best land has to be irrigated, much has to be drained, and some has to be protected against floods. Every acre of irrigated land must have a right to water, and the character of such right is nearly as important as the validity of the title to the land. To prepare some areas properly for settlement involves an immense expenditure of money. It is practically impossible for an immigrant to protect himself against misrepresentation in these matters.

Water and climate, as well as soil, influence the value of agricultural land in much of California. Wherever irrigation is required plans for colonies should provide for the efficient use of streams. As the irrigated area extends and population increases, so does the demand for water increase and in like measure the struggle for its control. In great irrigable areas, like the San Joaquin and the Sacramento valleys, all agriculture will in time be bound together by a common dependence on the streams. For this reason the ultimate results will be more satisfactory if colonization is carried out in accordance with a carefully thought out plan embracing all the irrigable land in each watershed.

State supervision of colonization ought not to include ordinary sales of land among individuals but only enterprises, of sufficient magnitude to have public importance, which seek to attract settlers, unacquainted with local conditions, from a distance or from a particular neighbourhood. It should be the aim of such supervision to provide : 1) that adequate attention has been given to water supplies and drainage in irrigated areas ; 2) that the land is suited to the purposes for which it is being sold ; 3) that there is no misrepresentation in advertising. It should also aim at helping those engaged on colonization by pointing out to them features in their plan which are likely to lead to failure.

In the past settlers and land settlement have been helped by the large increase in the price of land which accompanied development. This made it possible to borrow money for improvements or to sell a part of the original purchase for nearly as much as it all cost at first. This aid must be replaced by a more generous system of personal credit and more efficient and cheaper methods of preparing farms for intensive cultivation.

The experience of other countries and of some American colonizing enterprises indicates that it is cheaper for an organization having ample capital to level and sow the land and finance the building of houses, rather than leave this work to the individual settler.

The commission makes the following suggestions as to the future financing of settlers in California :

1) They should have from twenty to thirty years in which to pay for their land ;

2) After they have made the initial payment they should be required to pay nothing further on principal for the first two years, but the selling contract should stipulate the character of the improvements they must make ;

3) The payment for land should be amortized ; and the amount of annual or semiannual payments equal throughout the period of payment.

It also seems desirable that the State should establish one or more offices in which information as to approved colonizing enterprises could be obtained. California might, like West Virginia, distribute printed lists of land held by approved enterprises, stating the conditions of settlement and what crops might be grown on them.

The commission believed that over a considerable part of America the different States will soon have made colonization a public matter. In the east this will be done to lessen tenant farming and improve agricultural practices, in the west to settle unoccupied and uncultivated land rapidly. The tendency towards the adoption of this policy in the west is shown by the decision of the United States Reclamation Service to level and improve farms before offering them for settlement ; by the introduction of and hearings on the Crosser Bill which, if enacted, will go far towards financing settlers on public lands ; and by the report of the Co-operative Land Settlement Board in Wyoming, which has recommended that the federal government build irrigation works, and the State subdivide the land, select settlers, and finance their necessary improvements. It is understood that legislation to carry these recommendations into effect is being framed.

The immense area of land in the large estates of California would make progress too slow if it depended entirely on action by the State ; but the State can do much to promote the adoption of right policies by showing on a model colony the advantages of considering real agricultural development rather than local or immediate benefits. It is suggested that for this an area of about 10,000 acres be taken, from which there would have to be deducted approximately 300 acres for roads, canals, schoolhouses and recreation grounds, and 100 acres for farms labourers' allotments and a few small orchards and gardens. There would remain 9,600 acres or enough land to provide about two hundred farms varying in size from 20 to 100 acres. If these farms were all settled by alert, ambitious young men and women the advantage to agriculture in California would be great. The value of the demonstration would be increased if no settlers were admitted who were not experienced and trained, between eighteen and thirty years old, possessed of no farm land elsewhere in the State, and able themselves to reside on and cultivate their farms. The land should be paid for in thirty-six years, the initial cash payment being 5 per cent. while interest at 4 $\frac{1}{2}$ per cent., and amortized annual payments of 1 $\frac{1}{2}$ per cent of principal should begin at the end of the fourth year, the settler paying for his land and having a clear title while he does so by paying 4 $\frac{1}{2}$ per cent. on the cost in the first four and 6 per cent. in the remaining thirty-two years. Each settler should be required to have enough capital to pay in cash one fourth of the cost of all improvements made by the State, the payment of the other three fourths

to be amortized and bear the same interest as payments for the land. It is believed that on these terms existing financial institutions can give whatever credit is necessary for buying stock, including dairy cows.

The selection of colonists should be entrusted to a board, and the subsequent business management to a single competent superintendent reporting to this board. The State agricultural college should systematically provide information as to farming, and the superintendent should advise as to buying live stock and equipping farms. The State should, by contract, build houses, level land for irrigation, and lend money to settlers, within a fixed maximum limit, on insurable improvements carried out under the direction and to the satisfaction of the authorities in control.

The prices of farms, after subdivision, should be so adjusted that they pay for land lost on roads and canals, interest on the cost of the land between the time of subdivision and the time of settlement, and all other incidental expenses.

The selection of the land should be entrusted to an expert committee who would buy it at its productive value. This policy would, if it were understood, be a guarantee to settlers that they were getting their money's worth. The land might be paid for with State bonds bearing interest at the rate of perhaps 4 per cent., or it might be bought under a contract by which the landowner gave deeds to the settler directly, the State guaranteeing his payments and having the right to complete the purchase and enter into full ownership at any time deemed advisable. Existing State authorities could plan the works for a water supply, subdivide the area and fix the size of farms. The amount of capital to be provided for financing the settlers could be greatly reduced by making full use of the possibilities of loans under the Federal Farm Loan Act.

FRANCE.

THE INCREASE IN AGRICULTURAL WAGES FROM 1914 TO 1916.

SOURCE:

L'A MAIN-D'ŒUVRE AGRICOLE (*Agricultural Labour*), N° 216, 14th year, Paris, 10 July 1917.

The enquiry which the Ministry of Agriculture undertook among managers of agricultural departments as to agricultural wages has been concluded, and it is now possible to make use of the results obtained by the office of agricultural information within this ministry. The figures which we here reproduce show the average increase of the wages of labourers, whether fed by their employers or otherwise, the rate at which labour has decreased and the rate at which the average yield of a working day has diminished, in each department. Then for each agricultural district the average wages of labourers, whether fed by their employers or otherwise, in 1914 and in 1916 are shown; and finally the percentage of increase in the wages of labourers, fed and not fed by their employers, between 1914 and 1916; and the rate at which labour has been reduced and the average yield of a working day diminished in each district and in the whole country.

Department	Average increase in a labourer's wages		Reduction of labour due to the war	Diminution of average yield of a working day
	not fed by employer	fed by employer		
—	%	%	%	%
<i>1st Agricultural District — North-West.</i>				
Morbihan	63	100	—	30
Finistère	50	50	60	25
Manche	28	40	62	32
Ille-et-Vilaine . . .	27	25	70	4
Côtes-du-Nord . . .	41	50	14	15
Orne	42	50	65	20
Sarthe	46	60	61	36
Calvados	42	25	80	30
Mayenne	50	60	60	38
	1914	1916	1914	1916
	fr.	fr.	fr.	fr.
Average wages in			Average %	Average %
1st district . . .	3.25	4.66	1.86	2.80
Average increase . .	43 %	50 %	62	24

Department	Average increase in a labourer's wages		Reduction of labour due to the war	Diminution of average yield of working day
	not fed by employer	fed by employer		
	%	%		
<i>2nd Agricultural District - North.</i>				
Oise	42	56	47	30
Eure-et-Loir . . .	46	88	60	30
Seine-et-Oise . . .	81	95	65	35
Aisne	50	50	—	32
Seine-Inférieure . .	70	57	40	30
Seine	33	40	70	30
Seine-et-Marne . . .	27	25	40	20
Nord	38	43	50	28
Eure	12	25	70	—
Pas-de-Calais . . .	45	66	50	30
Somme	42	50	60	18

	1914 fr.	1916 fr.	1914 fr.	1916 fr.	Average %	Average %
Average wages in 2nd district . . .	3.44	4.93	2.11	3.28	55	30
Average increase. .		43 %		55 %		

3rd Agricultural District - North-East.

Vosges	65	25	80	33
Haute-Marne . . .	25	40	60	25
Meurthe-et-Moselle .	42	50	60	30
Marne	20	15	70	30
Haut-Rhin (Belfort)	33	33	70	30
Ardennes (1). . . .	—	—	—	—
Aube	68	60	50	25
Meuse (1)	—	—	—	—

	1914 fr.	1916 fr.	1914 fr.	1916 fr.	Average %	Average %
Average wages of 3rd district . . .	3.75	5.35	2.48	3.39	65	29
Average increase. .		42 %		37 %		

(1) Report not received.

Department	Average increase in a labourer's wages		Reduction of labour due to the war	Diminution of average yield of a working day
	not fed by employer	fed by employer		
	%	%		
4th Agricultural District — West.				
Charente-Inférieure.	57	60	66	30
Charente	71	86	50	30
Haute-Vienne . . .	36	50	40	40
Vienne	75	45	45	25
Deux-Sèvres	100	110	40	25
Loire-Inférieure . .	33	57	50	30
Indre-et-Loire . . .	—	33	95	90
Vendée	62	75	67	34
Maine-et-Loire . . .	57	75	80	40

	1914	1916	1914	1916	Average %	Average %
	fr.	fr.	fr.	fr.		
Average wages in 4th district . . .	3.36	5.45	2.46	4.08		
Average increase. .		62 %		65 %	59	38

5th Agricultural District — Centre.

Loir-et-Cher (Beau- ce, Perche) . . .	78	55	55	30
Loir-et-Cher (Solo- gne)	47	63	—	—
Yonne	38	30	60	30
Cher	63	66	60	20
Creuse	28	66	60	25
Indre	42	60	60	38
Nièvre	50	40	60	40
Allier	100	100	60	40
Loiret.	38	58	80	30
Puy-de-Dôme . . .	55	66	60	35

	1914	1916	1914	1916	Average %	Average %
	fr.	fr.	fr.	fr.		
Average wages in 5th district . . .	3.87	5.92	2.83	4.53		
Average increase. .		53 %		60 %	60	32

Department —	Average increase in a labourer's wages		Reduction of labour due to the war %	Diminution of average yield of a working day %
	not fed by employer	fed by employer		
	%	%		

6th Agricultural District — East.

Jura	55	50	35	28
Doubs	42	60	50	20
Saône-et-Loire . . .	65	50	60	35
Côte-d'Or	33	56	60	30
Haute-Saône	33	33	98	50
Loire	65	83	—	—
Ain	55	75	70	50
Rhône	51	85	60	33
Haute-Savoie	58	75	30	20
Savoie	50	50	20	33

	1914	1916	1914	1916	Average %	Average %
	fr.	fr.	fr.	fr.		
Average wages in 6th district . . .	3.43	5.15	2.14	3.46		
Average increase. .		50 %		61 %	54	34

7th Agricultural District — South-West.

Landes	63	50	75	28
Ariège	40	66	60	25
Basses-Pyrénées . .	80	83	62	13
Hautes-Pyrénées . .	50	50	40	22
Tarn-et-Garonne . .	43	64	55	30
Haute-Garonne . . .	77	62	40	40
Gers	46	53	54	34
Dordogne	62	50	50	50
Lot-et-Garonne . . .	75	75	98	—
Gironde	30	—	66	33

	1914	1916	1914	1916	Average %	Average %
	fr.	fr.	fr.	fr.		
Average wages in 7th district . . .	2.87	4.51	1.56	2.53		
Average increase. .		57 %		62 %	59	30

Department	Average increase in a labourer's wages		Reduction of labour due to the war	Diminution of average yield of a working day
	not fed by employer	fed by employer		
—	—	—	—	—
%	%	%	%	%
<i>8th Agricultural District — South.</i>				
Aveyron	62	65	50	25
Pyrénées-Orientales.	32	43	25	20
Cantal	—	—	75	50
Lozère	42	50	60	20
Lot	66	100	65	25
Hérault	52	77	60	12
Aude	50	60	30	25
Corrèze (1)	—	—	—	—
Tarn	50	66	60	60

	1914	1916	1914	1916	Average %	Average %
	fr.	fr.	fr.	fr.	—	—
Average wages in						
8th district . . .	3.46	5.19	2.29	3.83		
Average increase. .		50 %		67 %	53	29

9th Agricultural District — South-East.

Ardèche	38	40	60	33
Var.	33	25	60	18
Haute-Loire	33	60	60	25
Vaucluse	66	100	70	60
Bouches-du-Rhône .	50	42	55	20
Isère	100	100	60	30
Gard	42	42	45	30
Hautes-Alpes . . .	50	60	20	—
Drôme	66	70	65	20
Basses-Alpes . . .	42	75	60	30
Alpes-Maritimes . .	38	—	60	10

	1914	1916	1914	1916	Average %	Average %
	fr.	fr.	fr.	fr.	—	—
Average wages in						
9th district . . .	3.42	5.15	2.34	3.77		
Average increase. .		50 %		61 %	55	25

(1) Report not received.

*Average Increase of Wages in each District and in all France
from 1914 to 1916.*

Agricultural districts	Labourer's average wages			
	not fed by employer		fed by employer	
	1914 fr.	1916 fr.	1914 fr.	1916 fr.
1st District	3.25	4.66	1.86	2.80
2nd District	3.44	4.93	2.11	3.28
3rd District	3.75	5.35	2.48	3.39
4th District	3.36	5.45	2.46	4.08
5th District	3.87	5.92	2.83	4.53
6th District	3.43	5.15	2.14	3.46
7th District	2.87	4.51	1.56	2.53
8th District	3.46	5.19	2.29	3.83
9th District	3.42	5.15	2.34	3.77
Average agricultural wages in all France	3.43	5.15	2.23	3.52

Agricultural districts	Average percentage of increase in a labourer's wages	
	fed by employer	not fed by employer
	1914-1916	1914-1916
1st District	43	50
2nd District	43	55
3rd District	42	37
4th District	62	65
5th District	53	60
6th District	50	61
7th District	57	62
8th District	50	67
9th District	50	61
General average percentage of increase .	50	57.5

Average Reduction for all France of Labour and Yield.

Agricultural districts	Percentage	of diminution of yield of a working day
	of reduction of labour due to the war	
1st District	62	24
2nd District	55	30
3rd District	65	29
4th District	59	38
5th District	60	32
6th District	54	34
7th District	59	30
8th District	53	29
9th District	55	25
General average	58	30

GREAT BRITAIN AND IRELAND.

RATES OF CASH WAGES OF AGRICULTURAL LABOURERS IN ENGLAND AND WALES.

OFFICIAL SOURCE:

THE LABOUR GAZETTE, Vol. XXV, No. 7, London, July 1917.

Information is obtained annually from the chairmen or clerks of a large number of Rural District Councils showing the rates of cash wages most generally paid to the various classes of agricultural labourers not provided with board or lodging (1) in the rural district areas. Such rates, while by no means representing the labourers' total earnings, are useful as a means of comparing one year with another, and in the table below a comparison is made between the weekly rates paid in January 1914 and in January 1917. This period covers seven months prior to the outbreak of war but as the movement in wages between January and August of 1914 was relatively very small, the rates for January 1914 can be regarded as being substantially those prevalent immediately before the war.

The figures in the table show the *means* of the rates given for those rural districts in each country from which information has been received for both January 1914 and January 1917, and they cover over 80 per cent. of the total number of rural districts in England and Wales. As has been said, these rates do not represent total earnings but are only the nominal rates of weekly wages. To arrive at the total wages it would be necessary to add the value of allowances in kind, such as a free house, a potato ground, milk, etc., and the extra cash earnings from piece work, overtime, special harvest payments and in the case of men in charge of animals, such sources as journey money, bonuses for calves reared and lamb money. These vary on different farms and in individual cases, and the necessary particulars can only be ascertained by enquiries on a large scale addressed to individual families in every part of the country. Enquiries of this kind were last undertaken in 1907. A further enquiry was projected for the autumn of 1914 but was interrupted by the war.

(1) In certain of the Welsh districts a considerable number of the ordinary agricultural labourers are provided with food on weekdays but with no lodging. Particulars are given in the second table.

According to the statistics published by the Board of Trade in the report as to earnings and hours of labour in agriculture in 1907 (Cd. 5460), which were based on returns received directly from individual farmers, the average value of the extra earnings in cash and kind generally varied from about 2s. to about 4s. a week. So far as the Board of Trade is aware they had not altered to any considerable extent up to the outbreak of war. As is explained below, however, their value has probably since appreciated considerably.

If the cash rates in each county for ordinary labourers not provided with food be taken for purposes of comparison, it will be seen that their greatest increase between January 1914 and January 1917 took place in England in Durham (8s. 1d. a week), and in Wales in Flint and Merioneth (8s. 6d. a week). The county in which the increase was least was in England Hereford (4s. 2d. a week) and in Wales Cardigan (3s. 8d. a week). In only seven counties in England and Wales did the increase amount to less than 5 s. a week; in twelve it was 5s. or between 5s. and 6s., in eighteen 6s. or between 6s. and 7s., in eight 7s. or between 7s. and 8s., and in five more than 8s. a week. These figures do not concern Westmoreland and Anglesey from which only information insufficient for statistical purposes was received.

In addition to the increases in weekly rates of cash wages, shown by the table, the increase in extra earnings must be borne in mind. It is impossible with the information which is available to indicate the amount of this latter increase, but it may be pointed out that the present higher prices must have increased the value of most allowances in kind. In some cases they have also been increased in quantity. There is also evidence of the increase of piece-work rates and harvest wages. A correspondent in Essex states that piece-work rates in that county in 1916 were from 25 to 50 per cent. higher than before the war. In Norfolk it is the custom to pay labourers a lump sum for the harvest and this usually amounted to £7 or £7.10s. before the war, but in 1916 its minimum amount was £9.5s. Payments for overtime have also increased considerably during the war, owing mainly to the shortage of labour and to some extent to the introduction of the Day-light Saving Act.

Since January 1917, the date to which the latest available returns refer, the wages of the workers on the land are known to have increased, owing partly to the scarcity of labour and partly to the rise in the cost of living.

*Comparison of Mean of Weekly Rates of Cash Wages paid in January 1914
and in January 1917 (1).*

A. — England.

County	Ordinary Labourers (not provided with food)			Horsemen (not provided with food)			Cattlemen (not provided with food)			Shepherds (not provided with food)		
	Number of districts making returns	January		Number of districts making returns	January		Number of districts making returns	January		Number of districts making returns	January	
		1914	1917		1914	1917		1914	1917		1914	1917
		s. d.	s. d.		s. d.	s. d.		s. d.	s. d.		s. d.	s. d.
<i>Northern Counties:</i>												
Northumberland	6	21 0	27 5	9	20 4	28 5	8	20 1	27 9	9	20 11	27 9
Durham	7	20 9	28 10	14	20 10	29 9	8	20 5	28 11	6	20 11	29 2
Cumberland	5	18 11	25 1	5	20 7	27 2	4	20 6	26 11	3	20 4	25 8
Westmorland	*	—	—	*	—	—	*	—	—	*	—	—
<i>Yorkshire, Lancashire and Cheshire:</i>												
Yorkshire (East Riding)	10	18 2	25 4	7	19 3	26 11	9	19 2	26 9	9	19 7	27 3
„ (North Riding)	14	18 3	24 10	16	19 6	27 1	16	19 5	26 8	13	19 5	27 2
„ (West Riding)	23	18 10	25 8	24	20 10	28 0	23	19 9	26 11	20	20 4	28 0
„ (Whole county)	47	18 6	25 4	47	20 2	27 6	48	19 6	26 10	42	19 11	27 7
Lancashire	13	20 5	27 7	15	22 9	29 10	14	21 9	28 10	5	21 2	31 10
Cheshire	11	18 9	25 4	10	20 3	27 7	10	19 11	26 10	5	19 8	26 6
<i>North and West Midland Counties:</i>												
Leicestershire	12	17 2	25 2	12	19 4	26 5	12	19 0	26 0	11	19 4	26 7
Rutland	2	15 6	22 6	2	17 0	24 0	2	16 0	22 6	2	16 6	22 6
Lincolnshire	16	16 6	24 2	16	15 10	22 11	18	15 10	22 6	18	16 2	23 4
Nottinghamshire	7	18 3	24 7	7	19 11	27 3	7	19 8	26 11	7	20 1	27 6
Derbyshire	10	20 1	27 3	10	21 8	28 7	10	20 11	27 11	7	20 11	27 3
Gloucestershire	15	15 1	26 7	16	16 0	22 7	16	16 5	22 6	15	16 6	22 5
Monmouthshire	5	16 5	22 6	5	17 5	24 4	5	17 5	24 4	5	17 2	23 0

BY THE WEEK	15	12 1/2	21 1/2	15	17 0	24 1	13	17 0	25 0	15	17 3	23 5
<i>South Midland and Eastern Counties:</i>												
Middlesex	3	20 4	27 4	3	21 4	29 8	3	21 8	29 8	3	21 4	29 4
Hertfordshire	11	15 3	20 5	11	17 6	23 4	10	17 5	23 2	11	18 1	23 1
Buckinghamshire	7	14 8	21 3	7	16 7	24 0	7	16 7	24 4	7	16 6	24 5
Oxfordshire	9	13 0	19 4	9	14 11	22 3	8	14 10	22 1	8	14 11	21 11
Northamptonshire	15	15 5	21 1	15	17 5	24 0	15	16 8	23 2	14	16 11	23 0
Huntingdonshire	4	14 3	21 9	4	17 0	23 9	4	16 5	23 6	3	17 4	23 4
Bedfordshire	6	15 0	21 3	6	17 7	24 5	6	17 5	24 4	5	17 7	23 7
Cambridgeshire	6	14 8	22 1	6	15 10	22 9	5	15 10	22 8	5	16 10	23 7
Essex	15	14 8	22 4	16	16 8	23 11	16	16 11	23 8	13	17 0	24 0
Suffolk	16	13 7	20 0	16	15 7	22 1	16	15 5	22 0	16	16 0	22 2
Norfolk	18	14 0	22 0	18	15 11	24 0	18	16 0	24 6	11	16 2	23 9
<i>South-Eastern Counties:</i>												
Surrey	7	17 0	22 3	7	17 11	22 9	7	18 3	23 8	7	18 3	23 1
Kent	20	17 7	23 0	19	19 3	25 5	18	19 0	25 0	19	19 10	25 4
Sussex	13	15 1	21 10	12	17 5	23 7	12	17 5	23 3	9	17 11	23 3
Hampshire	21	14 5	20 2	20	15 9	22 0	20	16 7	22 2	19	16 3	22 4
Berkshire	7	14 6	19 6	7	15 5	21 10	7	16 1	22 3	7	15 7	22 3
<i>South-Western Counties:</i>												
Wiltshire	16	14 3	20 6	16	15 9	22 8	16	16 0	22 11	16	16 1	22 9
Dorsetshire	11	12 10	17 8	10	13 10	19 4	10	14 2	19 11	10	14 4	20 2
Devonshire	13	13 11	18 2	13	14 10	19 2	12	15 2	19 5	11	15 2	19 10
Cornwall	12	16 7	21 1	11	17 3	21 2	11	17 3	21 4	6	17 6	21 8
Somersetshire	12	15 4	20 5	11	16 4	21 6	11	16 4	21 5	8	16 1	22 0

(1) The rates stated are exclusive of extra earnings and allowances in kind. Some of the variations in cash rates are due to the variations in the value of these extra earnings and allowances in different counties and districts.

* Data insufficient for statistical purposes.

*Comparison of Mean of Weekly Rates of Cash Wages paid in January 1914
and in January 1917 (1)*
B. — Wales.

County	Ordinary labourers not provided with food			Ordinary labourers provided with food			Horsemen and cattlemen not provided with food			Shepherds not provided with food		
	Number of districts making returns	January 1914	January 1917	Number of districts making returns	January 1914	January 1917	Number of districts making returns	January 1914	January 1916	Number of districts making returns	January 1914	January 1917
		s. d.	s. d.		s. d.	s. d.		s. d.	s. d.		s. d.	s. d.
Flintshire	4	17 9	26 3	*	—	—	3	19 10	27 2	*	—	—
Denbighshire	6	18 6	25 4	7	10 8	15 7	5	18 1	25 1	*	—	—
Carmarvonshire	3	20 0	24 8	2	12 0	14 6	3	19 2	24 10	*	—	—
Anglesey	*	—	—	2	11 0	15 6	2	17 9	24 3	*	—	—
Merionethshire	2	17 9	26 3	2	10 6	18 3	*	—	—	*	—	—
Montgomeryshire	4	16 8	22 9	4	10 8	15 2	*	—	—	*	—	—
Cardiganshire	3	16 4	20 0	4	12 11	15 0	*	—	—	*	—	—
Radnorshire	5	15 0	20 1	4	10 3	14 6	4	14 6	20 6	3	15 4	19 8
Brecknockshire	4	17 11	23 3	3	13 2	17 4	3	17 10	22 4	3	20 2	24 4
Carmarthenshire	5	17 10	23 6	4	11 8	17 4	*	—	—	*	—	—
Pembrokeshire	4	16 8	21 0	4	11 0	15 9	*	—	—	*	—	—
Glamorganshire	5	20 2	27 10	5	14 8	17 10	4	20 9	28 9	3	19 8	26 4

(1) The rates stated are exclusive of extra earnings and allowances in kind. Some of the variations in cash rates are due to the variations in the value of those extra earnings and allowances in different counties and districts.

* Data insufficient for statistical purposes.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

FRANCE.

THE RESTORATION OF AGRICULTURE IN THE INVADDED DEPARTMENTS. — La
Main-d'œuvre agricole (*Agricultural Labour*), No. 217, 14th year, Paris, 25 July 1917.

On 30 June 1917 the Direction of Agriculture in the Ministry of Agriculture published, with a view to agricultural reconstruction in the invaded departments, instructions to which agriculturists should conform in order to resume occupation of their former farms. It is a fact that the resumption of agricultural life in these districts ought to be accomplished as soon as possible by the agricultural population still in them, the repatriated agriculturists, and those who have withdrawn into the interior and will now ask to return to their villages. But the stretch of land in question forms a so-called "reserved" zone of which the limits have been fixed by the military authority. Owing to the devastated condition of many places and for military reasons no general measure authorizing an immediate and collective repatriation can be passed. For the moment therefore leave to return can only be granted individually to agriculturists who previously resided habitually in the commune to which they ask to go, and whose return is recognized to be indispensable to the resumption of agricultural life. In his request an agriculturist should always indicate what is the importance of his farm and how he proposes to resume farming. Authorizations can be granted only in the measure of which the condition of communes, as regards means of access to them, their provisioning and the degree to which they are healthy, habitable and safe, permits. In every case a regular authorization will be the *sine qua non* of return.

The majority of the agriculturists will have to reconstitute their farms after their return, often building a temporary dwelling for themselves and shelters for their beasts; and always they will have to get together again their live and other stock and resume cultivation.

Since no one system of farming can be adapted to every kind of farm, each individual should determine on his best course in accordance with his ability and resources. Generally speaking, however, a garden should first be remade; then those foodstuffs which supply the first needs of man and beast — potatoes and other vegetables, forage, oats — should be planted, and finally the land should be restored to a condition allowing corn to be grown. The complete realization of the plan of cultivation will necessarily occupy several years, and depend on resources in labour and money and on the payment of indemnities for damages wrought by the war. In many cases an association of agriculturists will increase their credit and will encour-

rage the rapid resumption of agricultural life by giving solidarity to individual efforts.

For the reconstitution of dwellings in cases of urgency a special department has been instituted in the prefectorate of every department affected either in the past or the present by the invasion.

Even before the valuation of damages due to the war, urgent repairs of slightly damaged houses may be effected if the owner's poverty disable him from himself making the necessary repairs, of which the cost should not on principle surpass a fifth part of the value of the real estate before the war.

Bituminous cardboard and oiled cloth will be supplied gratis and axes lent for the purpose of preserving partially destroyed buildings and preventing the extension of damage.

Further, depots have been constituted of material which will facilitate the reconstruction in cases of urgency of dwellings by the persons interested. A single applicant may receive material of this sort up to the value of 1500 francs.

When real estate has been completely destroyed, and the previous occupiers thereof cannot find other temporary lodgings in the commune to which they have been authorized to return, they may ask for the grant of a temporary house, indicating the site on which they wish it to be erected and the number of members in their family. To meet such a demand the administration has caused stocks of temporary houses and collapsible shelters, which can be set up rapidly, to be constructed.

The first temporary shelters to be grouped in a devastated commune form the local receiving place for the repatriated refugees. They must consist of a series of houses destined from the beginning of the enterprise of repatriation for most urgent needs — a mayoralty and public offices, a relief station, a canteen and station for provisions, a reserve of furniture — in order to secure indispensable living conditions to those who have suffered losses in the communes in which destruction has been such that they have not been able to find shelter in the remaining houses.

In order, however, to enable the resumption of normal life or any agriculture a special department for bringing back the soil into a cultivable state must destroy bombs, level trenches, and remove wire entanglements.

Capital and stock are also necessary to the resumption of agricultural life. On principle money on account or advances on indemnities for war damages can only be granted if the cantonal commission, anticipated by article 4 of the decree of 20 July 1915, has testified to the damages and estimated them. Immediate advances, for bringing the land again under cultivation or harvesting crops, may however be made, by the medium of the prefect and agricultural departments of a department, to persons who have incurred loss where the estimating commission has not been able to exercise its functions. These advances consist of seeds, fertilizers, agricultural implements, draught animals and live stock.

Every application for an advance of this kind should indicate the extent of land to be cultivated, the kind of land, and the manner in which it

is divided into arable, meadow and grass-land. It should also state whether the petitioner is a landowner or a leaseholder, and what live stock he kept before the war.

Purchasing commissions have been appointed in each department to buy live stock, seeds and agricultural machinery. As gradually the goods so purchased are distributed their value is entered on account, and will be deducted from the indemnities due for war losses. These accounts are only granted to such of the persons who have incurred loss as need to benefit by the distributions. They are not granted to any persons, however great may be their losses, who are able to wait for the settlement which will follow on the enactment of the law.

GERMANY.

THE ACTIVITY OF THE ROYAL COMMISSION OF COLONIZATION FOR WEST PRUSSIA AND POSNANIA IN 1916. — *Die Tätigkeit der Königlichen Ansiedlungskommission für Westpreussen und Posen im Jahre 1916*, in *Archiv für innere Kolonisation*, Vol. IX, Part 8, Year 1916-1917, Berlin, May 1917.

The Royal Commission of Colonization for West Prussia and Posnanian has continued to exercise the activity which was the object of its foundation in spite of difficulties of every sort due to the duration of the war; but it has limited itself to undertaking strictly necessary business.

Twice as many properties have been offered to it as in 1915, but it has made purchases only in the interests of new German properties, that is to say when it was a matter of strengthening the position of these by uniting neighbouring lands to them. In one case however the decision was made to buy a property for no immediate reason but in order to help the *Breslauer Beamten Spar- und Darlehnskassen Vereins* (The Savings and Loans Funds of the Union of Breslau Officials) to make reimbursements to a considerable number of its depositors. The commission made seven new acquisitions, including one *Rittergut*, two State domains and two large peasants' properties. The total area acquired was 2,255 hectares (1).

The Commission received more numerous applications to purchase than in 1915, in all 2,200 as compared with 559 in that year. Of these 2,200 there were 655 which emanated from the armies and to these must be added some hundreds coming from workmen in Berlin and its neighbourhood. Only 21 transactions which concerned *Rentengüter* were concluded and of them only thirteen were finally made valid. Of the thirteen purchasers involved, five came from the west and south of Germany, six from West Prussia and Posnanian and two from abroad. The newly formed properties have an area of 165.45 hectares and represent a value of 257,600 marks (2); that is to say that each has on an average an extent of 12.72 hectares and a value of 19,815 marks. The ratio of actual purchases to applications is

(1) 1 hectare = 2.47 acres.

(2) 1 mark = about 11 3/4 d. at par.

somewhat low; the reason for this being that many applications were in fact mere requests for information from correspondents in the armies who wished, above all, to know on what terms they could become settlers after the war.

But obstacles were constituted especially by the insufficiency of building materials and the high prices of such as could be obtained, to say nothing of the lack of labour for the building necessary to new farms and of animals for transport and labour. It was also very difficult to procure live stock and the right quantities of goods necessary to a farm, and when they were obtainable they were dear. This almost impossibility of accomplishing essential building on farms will prevent the extension of colonization for some time longer. It is thought that the difficulty may be met by erecting only modest buildings which can be used provisionally, for the economic strength of a settler must not be imperilled by suffering him to incur too heavy charges through the buildings on his farm.

At the end of 1916 the Commission of Colonization had ceded 19,557 properties to be paid for by annual instalments, and 2,170 on lease, that is a total of 21,727 settlers' holdings. Of the leasehold settlers' holdings recently formed 103 have not changed their condition, but the form of the others has been altered so that they are now being bought by annual instalments. The 21,727 holdings are distributed as follows, according to the origin of the settlers occupying them:

5,736	or	26.4	%	—	settlers emanating from provinces to be colonized;
10,555	"	48.6	"	"	" other parts of Germany;
5,436	"	25.0	"	"	" abroad.

The stock of land of which the Commission of Colonization disposed at the end of 1916 extended to 59,172 hectares; and this could yield 30,100 hectares of colonizable land on which about 2,500 settlers' holdings could be formed.

Since it has come into existence 308,984 hectares have been ceded to the commission under the law on colonization: 31,375 hectares have been employed on objects of public utility, such as roads, the sites of churches and schools; 52,497 hectares have been sold to the State domains, the State forest administration and persons other than settlers; and 9,675 hectares have been reserved to serve as adjuncts to land already colonized or as building sites. Out of a total area of 461,633 hectares, 402,531 hectares or 87.2 per cent. have thus been employed for purposes other than colonization.

In 1916 no new plans for colonization were drawn up.

As to the commission's building activity this has purposely been kept within modest limits. Efforts have been almost confined to the erection of buildings on the properties to be paid for by annual instalments or held on lease. As regards new buildings we have to notice only three, constructed for objects of public utility, which cost 68,500 marks, and fifty-two built for individuals at a cost of 664,500 marks. The total expenditure on build-

ings was thus 733,000 marks. The new building of churches, schools and presbyteries, begun in 1914, has been interrupted.

Works executed for the improvement of the soil have also been of diminished importance. 167 hectares of cultivable land were drained and 209 hectares of cultivated marshy and meadowland improved; and 6,535 metres (1) of roads mended with stones or paved. Moreover 700 hectares of marshy land were redeemed, being converted into meadows.

The stock of settlers has been improved by a distribution of pedigree bulls and sheep for purposes of breeding. Moreover twenty-four cows and heifers and three draught-oxen have been sold to them, the animals emanating from the live stock reserves of the colonized holdings or being bought with the funds intended for the development of bull depositories in the colonization communes.

Much more attention has been paid than in the previous year to trees bearing fruit or otherwise usefully productive. In 302 colonists' gardens, along roads of communication and in the village pasture grounds, 12,026 fruit-trees have been planted as against 6,841 in the preceding year, 412 nut trees as against 151; 1,859 forest and ornamental saplings as against 947, and 2,349 saplings for hedges as against 264. The settlers have also formed seven model fruit-tree plantations containing 379 saplings. To care for the trees thirteen settlers and settlers' sons have been trained and eleven of them have already been engaged by contract. Hitherto as many as 170 have been trained and 111 of these are following the trade of forestry. As regards the protection of birds 604 nestfuls have been brought up artificially in thirty-six colonization villages in West Prussia and thirty in Posenania.

The economic position of the settlers has improved since 1915. The price of agricultural products has increased; the women have come to understand rural economy better; and many settlers have obtained leave on economic grounds. While in the preceding year 1887 prorogations of payment had to be granted there were only 1100 of them in 1916. The total sums remaining to be paid out of a capital of 12,000,000 marks passed between these two years from 500,000 to 425,000 marks. Everything possible has indeed been done to bring back the colonies to their normal circumstances; and the whole merit attaching to the value of these farms is understood when it is seen that during this year they were granted, always in the measure which was possible, the labour of a certain number of prisoners of war and the right to employ the necessary draught-animals; while 7,861 settlers, 9,383 sons and other members of the families of settlers, and 2,666 employees — in all 19,910 labouring men, were suffered to return to the farms.

The colonists' holdings have to some extent changed hands, either owing to the war or for other reasons. The number of holdings sold or let has risen from 78 to 109. Sixteen farms had to be sold by auction, but their occupiers had shown themselves to be bad managers before the war. In

(1) 1 metre = 1 yard 3.371 inches.

a few cases an additional cause for the auction was a lack of means which did not allow farming to be continued.

During the year 1 July 1915 — 1 July 1916 the commission administered (1) 230 individual properties and farms, extending over 111,636 hectares, of which 126 extending over 57,584 hectares were large farms. The other 104, extending over 54,052 hectares, have ceased to be administered by the commission which has remitted them to settlers.

At the end of the year 1915-1916 (July) 672 holdings, having a total area of 293,618 hectares, ceased to be directly administered by the commission.

In 1915-1916 cereals were sold for 6,510,437 marks; potatoes, sugar beetroot and live and other stock represented on 30 June 1916 a value of 7,075,800 marks as against 6,458,000 marks in the preceding year, that is to say it had increased by 617,800 marks.

At the end of 1916 the Commission of Colonization had at its disposal 176,126,537 marks; namely 95,836,230 marks for colonization properly so called, and 80,287,307 marks for the consolidation of peasant property and of large property in West Prussia and in Posnania.

REGENCY OF TUNIS.

THE SOCIETY OF THE FRENCH FARMS OF TUNISIA DURING THE WAR. —
L'Économiste français (*The French Economist*), 45th year, No. 31, Paris, 4 August 1917.

In our issue for January 1912 we gave sufficiently detailed information as to this colonizing enterprise. We wish now merely to recal that its success is due to its encouragement of the conversion of the European wage-earning labourer into a *mélayer*.

In spite of difficulties due to the war the balance-sheet showed on 31 December 1916 a profit of 231,872 francs. The society which has a capital of 2,250,000 francs, has continued rapidly to improve the value of the three rural properties registered as its real estate. They have a total area of 22,000 hectares (2) and in 1916 covered their own farming costs and furnished a part of the interest on the invested capital. But the continuation of the war has multiplied difficulties. Several agents were mobilized in 1916, and labour has become much dearer because Tunisia has sent to France several thousands of native labourers and soldiers. On the other hand there has been compensation for these disadvantages in the high prices of agricultural products.

The following table allows of a comparison between the annual profit from the society's three chief sources of revenue in the last four years :

(1) Cf. our issue for December 1912, *Bulletin mensuel des Institutions Économiques et Sociales* 4th year, vol. 25, pp. 157 et seq.

(2) 1 hectare = 2.47 acres.

	1913	1914	1915	1916
Saint Cyprien	87,149	*39,748	184,887	154,540
Munchar	39,310	68,967	42,575	71,660
Business of real estate and industrial business . . .	146,991	224,590	112,252	78,484

We should mention that the profits of 1916 would have been yet more considerable if the prices of barley and oats had not been fixed at less by from 5 to 7 francs a quintal (1) than the official prices in France. The selling prices of wine were less by from 30 to 35 francs a hectolitre (2) than those which obtained in the south of France. The prohibition on principle of the export of wines, and the difficulties of sea transport and of land transport in France, were chief causes of this difference in value.

Of the 22,000 hectares of the three domains comprised under the heading "business of real estate", about 15,000 can be brought under regular cultivation within a relatively short time. These vast spaces can be utilized rapidly especially for stock farming: the pasture lands supported by the natural prairies, used either for hay or grazing, offer in Tunisia considerable resources which can be improved by special arrangements. The cultivation of cereals or artificial forage, at the price of longer efforts and a larger investment of capital, should take a second place, and new areas should be ploughed only when prudence is exercised and sufficient preparations are made. Agricultural hydraulic works, notably the projected Medjerdah canal, will allow water to be obtained for watering animals and irrigating hundreds of hectares.

The credit balance shown on the profit and loss account, together with the sums carried over from previous years, gives a total available sum of about 323,200 francs, employed as follows: legal reserve 5 per cent. — 9,800 francs; quotas due in virtue of by-laws and contracts — 35,000 francs; various redemption payments 30,000 francs; dividend on shares (25 francs on each title) 75,000 francs. After various allocations in accordance with the by-laws the sum of 98,750 francs was carried over to the year 1917.

To conclude: the society of the French Farms of Tunisia has triumphed over difficulties determined by the general situation. After having made the progress of its undertakings secure it has continued to improve the value of its property by works of irrigation, the formation of new flocks and herds, the plantation of vines, thus taking an important step towards carrying out its programme which consists essentially in the development of agricultural production.

* Deficit.

(1) 1 quintal = 220 lbs.

(2) 1 hectolitre = 21.9 gallons.

UNITED STATES.

THE RISE IN THE VALUE OF IMPROVED FARM LAND. — *The Annalist*, Vol. 9, No. 223, New York, 23 April 1917.

While reclamation has been adding hundreds of thousands of acres to the fertile land of the United States, the value of the land under cultivation, including the improved farm land, has been rising rapidly. Since 1912 the value of improved farm land in California has advanced to an average of \$200 an acre, an increase of \$93. This represents the extreme limit of the advance; California has superseded Illinois as the State in which improved farm land has the highest average value. Improved farm land in Illinois now has an average value of \$140 an acre, as compared with \$119 in 1912. The lowest increase in average value is \$1 an acre, and this is recorded for South Carolina and for Wyoming. In only three States of the Union has there been a decrease in average value, namely one of \$1 an acre in Colorado and Montana and one of \$2 an acre in Louisiana.

Other changes are shown in the following table, compiled from figures issued by the Department of Agriculture.

States	Value per Acre of Improved Farm Land.			Increase per Acre between 1912 and 1917
	1917	1916	1912	
	\$	\$	\$	—
Maine.	41	37	36	5
New Hampshire	40	38	34	6
Vermont	44	40	34	10
Massachusetts	76	75	66	10
Rhode Island	85	100	60	25
Connecticut	62	62	55	7
New York.	72	67	65	7
New Jersey	105	100	93	12
Pennsylvania	72	65	53	19
Delaware	73	64	60	13
Maryland	65	60	42	23
Virginia	45	42	34	11
West Virginia	42.50	39	32	10.50
North Carolina	42.50	37	28	14.50
South Carolina	35	32	34	1
Georgia	30	28	26	4
Florida	55	52	45	10
Ohio	95.50	91	77	18.50
Indiana	103	98	82	21
Illinois	140	130	119	21
Michigan	70	65	54	16
Wisconsin	95	90	63	32

States	Value per Acre of Improved Farm Land.			Increase per Acre between 1912 and 1917
	1917	1916	1912	
	\$	\$	\$	—
Minnesota	83	75	56	27
Iowa	156	153	106	50
Missouri	69	65	54	15
North Dakota	39	37	30	9
South Dakota	63	60	48	15
Nebraska	80	76	74	6
Kansas	60	58	53	7
Kentucky	47.50	41	33	14.50
Tennessee	46	42	33	13
Alabama	21	20	19	2
Mississippi	25	23	20	5
Louisiana	33	27	35	2 *
Texas	45	39	36	9
Oklahoma	35	31	29	6
Arkansas	32	27	24	8
Montana	35	34	36	1 *
Wyoming	33	33	32	1
Colorado	62	60	66	4 *
New Mexico	50	45	48	2
Arizona	105	80	80	25
Utah	105	90	80	25
Nevada	90	85	70	20
Idaho	71	64	66	5
Washington	100	102	100	—
Oregon	82	70	75	7
California	200	180	107	93

* Decrease.

RUGGERI ALFREDO, gerente responsable.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXXII.
8TH. YEAR: NUMBER 10
OCTOBER, 1917.



ROME
PRINTING OFFICE OF THE INSTITUTE
1917

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Part I: Co-operation and Association

CANADA.

THE CO-OPERATIVE MARKETING OF AGRICULTURAL PRODUCE.

OFFICIAL SOURCES:

CUMMING (M.), Secretary for Agriculture in NOVA SCOTIA; BELANGER (E.) of the *Journal d'agriculture* of QUEBEC; HART (F. C.), Director of Co-operation and Markets Branch of ONTARIO; THOMSON (W. W.), Director of Co-operative Organization Branch of SASKATCHEWAN; CRAIG (H. A.), Deputy Minister of Agriculture of ALBERTA; all in THE AGRICULTURAL GAZETTE OF CANADA, Vol. 4, No. 4, Ottawa Government Printing Office, April 1917.

OTHER SOURCE:

Egg Marketing Service in Alberta, *The Grain Growers' Guide*, Winnipeg, 8 August 1917.

Recently much has been accomplished in Canada in the way of marketing agricultural produce co-operatively. The system has been found to be useful in that it relieves the farmer of the task of bargaining and selling and in that it tends to secure higher, uniform and fairer prices. This co-operative movement is guided and regulated by federal and provincial legislation and helped by federal and provincial Departments of Agriculture. The marketing of the most diverse products is effected, notably that of dairy produce, tobacco, sugar and maple syrup, seeds for sowing, fruit, poultry and eggs, vegetables, honey, live stock, wool, potatoes, onions, grain and meat. In this review we have already noticed several examples of this form of co-operation, notably the co-operative sale of live stock and wool, and that of butter and cheese in the province of Quebec.

The *Agricultural Gazette of Canada*, the official organ of the Department of Agriculture, in order to ascertain the steps taken hitherto in the different provinces for the furtherance of the organization of co-operative marketing, requested leading officials to supply information on the subject. We will summarize the principal results of this enquiry.

§ I. THE ORGANIZATION OF CO-OPERATIVE MARKETING IN ONTARIO.

The Ontario Department of Agriculture does not interfere in the business of marketing organizations. It does not itself do any marketing, even for the purpose of advertising the co-operative method. Its aim has been in every case to build up organizations of producers which are economically sound and self-supporting and take their proper place in the trade in farm products. Through its various branches the department can keep in touch with these organizations and help them. Through the Co-operation and Markets Branch it can help towards organization and incorporation and provide inspection of organizations. The introduction of district representatives has facilitated its task.

The following are some figures as to the various organizations.

There are seventy fruit growers' associations in the province : forty-six of them sell the fruit of their members and six buy for them supplies of spraying matter. The others have purely educational ends. The province produces annually about 3,000,000 barrels of apples, of which 250,000 barrels or 8 per cent. are marketed through associations of growers. A large proportion of the fruit of these associations is sent to West Canada and sold directly to farmers' organizations. The remainder is sold to the trade or exported, none or very little being sold by the organizations to consumers. The provincial Fruit Branch does most of its educational work through these organizations. It was largely responsible for organizing the Ontario Co-operative Fruit Organization, made up of seventeen local organizations which consign their fruit through one manager.

About seventy egg circles have been organized in the province and thirty or thirty-five of them are now active. In only one case has a group of circles combined to make consignments under one management. Otherwise they do business individually. Practically all the eggs are sold to wholesale houses directly, although in Eastern Ontario a few circles sell to large individual customers. Only one or two circles, which market poultry, deal in anything except eggs.

The thirty vegetable growers' associations in the province have a provincial organization which meets annually. These associations are mainly educational. A few years ago the provincial organization experimented in the co-operative purchase of seed for its local associations, but for various reasons this enterprise was discontinued. Ten of the associations sell vegetables.

The honey producers are well organized for educational purposes. The local associations are united in a provincial association which meets once a year and appoints the very important so-called "crop committee". This committee meets as occasion demands, receives reports as to the prospective production of honey, and recommends the wholesale prices at which it should be sold. Neither the provincial association nor the committee sells any honey nor acts otherwise than in an advisory capacity. The

experiment has recently been made of organizing one small honey-selling organization in the province.

Some thirty-one seed centres have recently been organized in Ontario by the Canadian Seed Growers' Association. As yet only half a dozen of them have seed for sale.

There have been organized some nineteen or twenty district breeders' associations, each of which holds a yearly sale of the stock of its members. A number of farmers' clubs in the province have for many years been carrying on the co-operative consignment of live stock, one club having an annual turnover of \$100,000.

There are 160 creameries and 1,000 cheese factories. Most of them are joint stock companies but are co-operative in so far as most of their stock is held by those who furnish their material. Dividends are however largely declared on stock and not on the produce so furnished. Dairy farmers all over the country are organized in associations, which do not as a rule trade in milk but intervene between producers and the trade, enabling contracts. At one centre only there is a producers' organization which collects its members' milk and retails it with very apparent and growing success.

There are between 300 and 400 farmers' clubs in the province. Their main object is educational but some of them are trying to market one or more products. A few are attempting to consign live stock, and the organization of other marketing associations has arisen out of many of them.

A number of recently formed organizations are endeavouring to trade in many commodities. The Manitoulin Marketing Association at first marketed wool but is now dealing also in lambs and cattle. It aims at marketing practically all the products of Manitoulin Island.

In their initial stages co-operative associations are not equipped for taking over all the functions of middlemen and dealing directly with consumers. Their trade is largely with the wholesale houses, and so far their business has been too limited largely to affect the price of farm produce for consumers. In practically every instance however they have improved the quality of output and reduced waste. The egg circles have practically eliminated that share of the 17 per cent. of bad eggs, estimated to come onto the market, for which their members were once responsible. The producer has in consequence received a slightly higher price for his eggs — on an average for the year from one to three cents a dozen more than before — and the consumer pays the old price but receives better value. The progress of co-operation in the province certainly justifies a hope that the cost of marketing will be lessened and the consequent gain shared by consumer and producer.

The following figures, which are approximate, give an idea of the movement towards association and co-operative marketing in this province.

Kind of association	Number of associations	Number of members	Number of associations selling agricultural products
Agricultural Societies	360	100,000	—
Women's Institutes	900	30,000	—
Farmers' Institutes or Boards of Agriculture	90	19,000	—
Farmers' Clubs	300	12,000	—
Experimental Unions	1	5,000	—
Egg circles	60	2,100	35
Fruit growers' associations	70	2,100	52
Ploughmen's associations	15	1,500	—
Corn growers' associations	3	1,200	3
Vegetable growers' associations	30	1,000	11
Horse breeders' associations	1	525	—
Dairymen's associations	2	500	—
Poultry associations	1	470	—
Swine breeders	3	440	—
Bee keepers' associations	26	425	1 (Honey producers' association.)
Potato growers' associations	3	300	3
Seed Centres	31	267	31
Sheep breeders' association	1	230	—
Onion growers' associations	2	70	2
Seed " "	1	50	—
Tobacco " "	1	—	1
Bean " "	1	—	1
School fairs	268	61,000	—
Junior farmers' improvement associations	75	1,600	—
Creameries	160	38,000 patrons	160
Cheese factories	1,000	40,000 "	1,000
Ontario Co-operative Fruit Growers' Association	1	—	—
United Farmers' of Ontario	1	—	—
United Farmers' Co-operative Company	1	—	—
Breeders' clubs	20	—	18

To this list there should be added the unknown number of the Milk Producers' Associations, Live Stock Shipping Associations, Beef Rings and Weigh Scales Associations, and of the Farmers' Clubs having a selling branch.

Complete data are also lacking as to the turnover of the various classes of associations. It is known however that 23 Fruit Growers' Associations received \$442,775.70 for sales and that 19 spent \$60,477.67 on purchases; that 14 Egg Circles sold produce for \$111,035.22 while three bought for \$536.50; that 12 Farmers' Clubs sold produce for \$178,624.39 while 71 of them spent \$225,267.89 on purchases; and that nine Rural Organizations sold for \$145,011.90 while three of them bought for \$5,750.52.

§ 2. CO-OPERATIVE POULTRY MARKETING IN SASKATCHEWAN.

The practice of fattening and marketing poultry co-operatively was introduced into Saskatchewan in 1907, when the Provincial Dairy Commissioner established two stations for fattening poultry in connection with two government creameries. Local farmers brought their birds to these stations to be fattened; and on fixed and widely advertised dates a poultry expert in the employ of the Dairy Branch gave demonstrations at the stations of killing and dry plucking and delivered lectures on various subjects connected with poultry farming. The dressed poultry was then sold by the Dairy Commissioner, and the proceeds, less the cost of fattening and marketing, remitted to the producers. This system of marketing aroused considerable interest; and in 1913 eight stations were at work and dealt with 5,126 pounds of poultry.

It was however realized that these stations could serve only a limited number of persons. As many had become familiar with the methods of fattening, it was decided to discontinue the stations and place the services of the Department of Agriculture at the disposal of all poultry farmers in the province. It had been found that poultry dressed on farms did not sell well, largely because the birds were seldom thus properly killed and dressed, and therefore did not keep well even in cold storage. It seemed therefore that the department could most usefully establish one or more killing and marketing stations to which farmers could send the birds they fattened, to be killed and dressed on a uniform plan by experts and afterwards sold in quantities large enough to attract the attention of the principal poulterers' firm.

In the autumn of 1915 this work was undertaken by the Co-operative Organization Branch; and with the help of the department of poultry husbandry in the provincial agricultural college a poultry killing and marketing station at Saskatoon was conducted during December. As the birds reached this station they were weighed and graded, and an advance payment of the approximate amount of the current market price was sent to the owner. The birds were killed, dressed, and placed in cold storage until February, when they were sold and the price received for them, less the sum advanced and the cost of handling, sent to the owner. Altogether 18,799 pounds of poultry passed through this station; and the prices realized were higher by from three to five cents a pound than those locally prevalent at that season, and gave general satisfaction.

In 1916 two killing and marketing stations, at Saskatoon and at Regina, were conducted on these lines. The following table shows the quantities of poultry which passed through them ;

	Regina	Saskatoon
Chickens	9,169	14,280
Other fowl	7,812	10,188
Turkeys	6,519	6,900
Ducks	1,101	817
Geese	97	789
Total	24,698	32,974

The results of the sales are not yet known.

Plans for extending the work and making it more generally useful to poultry farmers in the outlying parts of the province are being considered. It is evident that the expense of getting the birds to the stations — now the greatest drawback to the system — must be reduced. Perhaps additional killing stations might be established at points where several different railway lines converge ; or a collection of consignments might be made by a specially equipped freight car which would run at fixed and well advertised times over the railway lines tributary to each killing station.

§ 3. CO-OPERATIVE MARKETING AND THE ORGANIZATION OF MARKETS IN ALBERTA.

Great efforts have been made in the province of Alberta to organize the trade in agricultural produce co-operatively.

In this review we have already noticed the co-operative sale of wool graded according to quality (1) which has had a most encouraging success. Three years ago Alberta wool was selling for from 11 to 14 cents a pound or even less. In 1916 the price was from 30 to 35 cents ; and although the rise was partly due to the special conditions, it cannot be denied that the various woolgrowers' organizations have steadied and improved the market. At present such associations are at work at Edmonton, Calgary, Lethbridge, Vermilion, Pincher, Creek and Lacombe. Practically the whole of the Alberta clip will be co-operatively marketed this year.

The owners of purely bred flocks have moreover organized combined sales of rams, and these are having a good influence in standardizing prices and advertising purely bred stock.

The Grain Commission, directed by the dominion government, exercises great powers with respect to the classification of grain and the grain trade generally. Co-operative selling is conducted by two farmers' organizations

(1) See our issue for February 1917, page 14.

which have several times occupied our attention (1), the Grain Growers' Grain Company and the Farmers' Co-operative Elevator Company. We need only recall the important role they play on the grain exchanges and the large amount of grain they handle. The representative of the producer is through them himself in a position to know how grain is handled and to prevent the deflection of profits to middlemen.

The Department of Agriculture has a branch for marketing butter directed by the Dairy Commissioner. All creameries may have their butter marketed through the commissioner if they sign an agreement with the department. They send their butter to him at Calgary directly; it is graded and placed in cold storage; and may be either sold immediately or kept until its price rises. As soon as it is received the commissioner or one of his staff reports to the buttermakers on its quality, and advises as to its improvement, sometimes in the person of instructors sent out to the factories. This system has a good effect in standardizing the grades of butter and improving its quality.

Egg circles are less numerous in Western than in Eastern Canada, where there is more poultry and settlement is closer. In 1916 however eight of these associations were organized in Alberta by the representative of the Dominion Department of Agriculture. Each member of an association agrees to sell his eggs by its means. In some cases he deposits \$5 which go to form a fund with which to finance sales and which allow an advance payment to be made for each consignment. In the first place the eggs are graded: they are sold by grades; and as their identity is preserved members supplying high grades are rewarded and those supplying low grades penalized. No eggs may be sent by a farmer when they are more than three or four days old.

A farmers' Egg Marketing Service has been established. Until the farmers themselves are able to manage it, it will be supervised by officials of the poultry division of the Provincial and the Dominion Departments of Agriculture.

Its objects are: (a) to provide farmers of the province, including those in the most outlying districts, with the best possible marketing facilities; (b) to provide for the efficient grading of the eggs with a view to obtaining the highest prices; (c) to make it possible for individual farmers to receive prices proportionate to the quality of their eggs; (d) to ascertain, by examination of the eggs, which members are not following effective methods, so as to be able to advise them intelligently; (e) to stimulate a larger production of poultry and eggs for the benefit of the farmers themselves as well as to meet the exigencies of war conditions; (f) to eliminate the unnecessary loss now consequent on inefficient marketing and to develop a good reputation for Alberta eggs.

Any farmers' organization will have the privilege of consigning eggs to the Egg Marketing Service. It is suggested that in the case of such as them as are not specially organized egg marketing associations, arrangements

(1) See our issue for March 1917, p. 18.

for the consignment of the eggs and for supervision be entrusted to the executive of the organization or a specially appointed egg marketing committee, which should first arrange for one or more collecting depots at the local centre or the point of consignment. It is suggested that the tradesmen who have hitherto been handling the eggs be included in the arrangement, and co-operate as local consigners, each of them receiving one cent. per dozen eggs or 30 cents. a case for his work. Local consigners should make a point of sending eggs to the grading station as soon as they have accumulated a sufficient quantity of them.

All local poultry farmers should be allotted numbers by the local consigners, each consigner using a particular range of numbers. This system will render the identification of the eggs certain.

§ 4. LEGISLATION AS TO AGRICULTURAL CO-OPERATION IN NOVA SCOTIA.

In the year 1908 an " Act to Facilitate the Incorporation of the Farmers' Fruit Produce and Warehouse Associations " was passed by the legislature of Nova Scotia. It has been amended from time to time, and now contains special provisions allowing local companies of farmers and fruit growers to unite for the purchase of supplies of all kinds, and for disposing of farm produce, including fruit, field crops, live stock and live stock products. Other provisions enable the union of local companies which wish to co-operate with each other. Such a union is exemplified in the United Fruit Companies of Nova Scotia, an organization which buys and which distributes among the local units produce of the kinds already mentioned, and which disposes of produce which farmers wish to market co-operatively. Hitherto the companies organized under this Act have been in the fruit growing districts, but there is nothing to prevent such organization on the part of farmers in any district of the province, whether or not they be fruit growers.

In 1914 " The Farmers' Co-operative Societies Act, 1914 ", was passed. It provides for the incorporation without fee under the Nova Scotia Companies' Act of any society of farmers; and allows them to co-operate for the purchase of " manures and artificial fertilizers of all kinds, feeding stuffs, seeds, spraying materials, spraying outfits, and farming outfits of all kinds ", and for the sale of any farm produce. They are limited as to the objects they may purchase, practically to materials directly necessary to agriculture, household commodities being excluded, but they may sell any farm produce, including live stock. The Department of Agriculture has usually recommended societies of farmers in all but the fruit growing districts to co-operate under this latter Act.

It was felt however that it might be disastrous to grant too wide powers to such societies in the less closely settled parts of the province. Hence all the societies in the Annapolis Valley and the adjoining fruit growing

districts are incorporated and doing business under the former of the Acts we have cited, while those outside the fruit growing districts are governed by the " Farmers' Co-operative Societies Act, 1914 ".

Hitherto the Department of Agriculture has supported these organizations only by its propaganda work. All the organization in the fruit growing districts has been approved by the department but is due to private initiative. Outside these districts the department has given some help in that it has held meetings to explain the nature and purpose of the co-operative organization (1).

(1) For information as to the provinc of Quebec we refer the reader to the article entitled " The Dairy Industry in the Province of Quebec and Co-operation " in our issue for August 1916, page 5, which gives an account of the Co-operative Society of Cheesemakers of Quebec, and to page 40 of our issue for July 1916, where under the title " Co-operation in Quebec " we give some data as to the co-operative agricultural association, formed chiefly by tobacco planters, in the Yamaska Valley. There exist also in Quebec the Pure Maple Sugar and Syrup Producers' Agricultural Co-operative Association ; and the Quebec Seed Growers' Co-operative Association, which was established in 1914, owns large warehouses, and has a capital of more than \$ 22,800 which will reach \$ 30,000 and has been subscribed by more than 200 members. This latter society owns plant of the most modern description for treating and testing seed.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH INDIA.

1. THE ACTIVITY OF CO-OPERATIVE CREDIT SOCIETIES IN CEYLON IN 1916. — Supplement to *Tropical Agriculturist*. July 1917.

Fourteen new societies registered in 1916 brought the total number of co-operative credit societies in Ceylon up to 68. They are distributed as follows: 19 in the Western Province; 9 in the Southern Province; 10 in the Central Province; 17 in the Northern Province; 2 in the North-Western Province; 4 in the Province of Uva; 3 in the Province of Sabaragamuwa; 2 in the North-Central Province; and 2 in the Eastern Province.

The total membership of these societies is 6,488, having increased by 2,230 in 1916. Their total paid-up capital is Rs. 29,040 (1). During 1916 they lent to members Rs. 25,168 and recovered Rs. 13,018.82, while they received altogether in government loans Rs. 2,135.

Thirty-four societies were inspected during the year.

All the societies, except three which are industrial, have agricultural improvement as their main object. Several of them have tried to grow new strains of paddy, received through the Ceylon Agricultural Society, and a few are starting experimental gardens with outside help. Seven have bought 79 tons of manure, of the approximate value of Rs. 8,000, for paddy and cocoanut plantations.

* * *

2. CO-OPERATIVE SOCIETIES IN BENGAL, IN 1915-1916. — *Report on the Working of the Co-operative Societies in Bengal for the year 1915-1916*. Calcutta, Bengal Secretariat Book Depot, 1916.

The conditions of 1915-1916 were not uniformly favourable to co-operation in Bengal. Floods caused considerable damage to the jute and the winter rice crops in many districts of Eastern Bengal. In the Bankura district famine prevailed. In Tippera district the low price obtained for jute in 1914-15 brought about a want of ready money among the labouring and cultivating classes; and high floods in June, July and August 1915 destroyed the crops on the ground and with them the visible security for credit, and thus induced wide-spread distress although there was never a shortage of food supplies.

(1) 1 Rupee = 1s. 4d.

The assistance rendered in these circumstances by the co-operative societies was substantial. During the year the number of societies of all kinds in Bengal rose from 1,992 to 2,243, the number of members from 107,116 to 121,833, and the working capital from Rs. 1,09,51,050 to Rs. 1,24,48,573. The progress made in four years becomes clear when it is recalled that on 30 June 1912 the combined capital of all the societies was Rs. 26,00,000. Of the Rs. 1,24,48,573 which constituted the combined working capital in the year under review Rs. 42,37,744 represented loans from central and other societies, and the net capital was therefore Rs. 82,10,829.

Central Societies. — The scheme for the inauguration of a provincial bank in the presidency was again considered but it was decided that it should remain abeyant for the present. The majority of the central banks have no difficulty in raising sufficient capital locally. Two new central banks were established during the year, but one former central bank came to be classed as a non-agricultural society and the total number of these banks was therefore 39 on 30 June 1916. Their working capital rose during the year from Rs. 40,88,000 to Rs. 46,00,000; their paid-up share capital from Rs. 4,89,000 to Rs. 6,52,000; and their deposits from Rs. 33,69,000 to Rs. 37,61,000. Their total fluid resources on 30 June 1916 amounted to Rs. 8,41,984. Outstanding loans amounted to Rs. 37,67,420 as against Rs. 31,01,490 in 1915. Loans granted in 1915-1916 amounted to Rs. 13,95,000; and therefore the total amount of loans on 30 June 1916 was Rs. 51,62,420. In 1915-1916 a sum of Rs. 7,91,607 was collected towards principal from the debtor societies, including central societies, as against Rs. 2,68,000 in 1914-1915. On the whole there was a great improvement in the working of the central banks.

Supervising Unions. — The number of these increased in 1915-1916 from eight to twelve, and their membership from 139 to 177.

Agricultural Societies. — There were fewer registrations of new agricultural societies in 1915-1916 than in previous years. Their number rose from 1,853 to 2,063, thus increasing by 210; and their membership rose from 85,515 to 94,006, thus increasing by 10 per cent. instead of by 16 per cent. as in the previous year. The combined working capital rose from Rs. 42,74,969 to Rs. 56,93,529, increasing by about 8 per cent. Of the 2,067 societies 1,860 are affiliated to central banks. The average capital of a society decreased from Rs. 2,844 in 1915 to Rs. 2,754 in 1916. Loans issued to members amounted to Rs. 16,86,000 in 1915-1916, as against Rs. 15,73,000 in 1914-1915. Loans amounting to Rs. 14,11,991 were repaid by members in 1915-1916 as against Rs. 7,73,900 in 1914-1915. On 30 June 1916 outstanding loans to members amounted to Rs. 49,78,046, of which Rs. 13,24,388 or 26.6 per cent. were overdue. The percentage overdue on 30 June 1915 was 28.4. There was thus an improvement in realizations.

Two new *grain banks* were formed, and one new *supply society* which made the total number of supply societies three. An interesting experiment was the formation of the *Khelar Irrigation Society*.

Non-Agricultural Societies. — The number of the credit societies having limited liability, which form the great majority of the non-agricultural

societies, passed from 76 to 90, their membership from 15,644 to 21,029 and their working capital from Rs. 15,67,000 to Rs. 20,46,000. Loans repaid during the year by members amounted to Rs. 13,02,992 as against Rs. 9,78,627 in 1914-1915. The percentage of the amount of loans outstanding at the beginning of the year and of those granted during the year formed by repayments during the year was 41.08 in 1915-1916 as against 41.1 in 1914-1915.

The existence should be noticed of seven co-operative fishermen's societies. The number of weavers' societies increased during the year from five to 17, but four of them had not yet become active on 30 June 1916. At that date one cattle insurance society had begun operations.

Reserve Funds. — The following table shows the reserve funds of the three kinds of societies at the beginning and end of 1915-1916.

	On 1 July 1915 Rs.	On 30 June 1916 Rs.
Central Banks	75,072	1,11,901
Non-Agricultural Societies . .	64,693	91,956
Agricultural Societies	4,54,798	6,28,050

The figures for 30 June 1916 exclude appropriations to reserves from the year's profits. In this year the central banks made a net profit of Rs. 1,08,538; the non-agricultural societies one of Rs. 1,03,961; the agricultural societies one of Rs. 1,92,498.

Thus the co-operative movement is acquiring public favour more and more, a fact proved by the increased inflow of deposits; and its importance to agricultural development in the presidency is being noticeably accentuated.

FRENCH PROTECTORATE OF MOROCCO.

THE THRIFT SOCIETIES.

A *dahir* of 26 May 1917 has extended to Morocco the native thrift societies, as these exist in Algeria and Tunisia. It is their object:

" 1st. To enable native cultivators, by loans in money and kind, to maintain and develop their crops and plantations and to improve and increase their agricultural implements and their flocks and herds;

" 2nd. By means of loans or temporary relief to help poor cultivators suffering seriously from diseases, epizooty, invasions of grasshoppers or crickets or other disastrous events;

" 3rd. To rescue native cultivators from the evil practices of usury and engrossment, superseding the natives when necessary and taking in their place all action tending to annul or reduce their engagements to outsiders who have

taken advantage of their weakness, their foolishness or their inexperience, and tending to repudiate payment of the sums thus demanded ;

" 4th. To make contracts for collective insurance against fire, hail, mortality among live stock, etc. ;

" 5th To form co-operative societies for buying, selling, preserving and converting agricultural products emanating from the farms of members exclusively ;

" 6th. To buy and keep agricultural machinery to be let to members of the society for small sums ".

All native cultivators not protected by foreigners paying the land tax belong compulsorily to the society, and centimes additional to this tax occur among assets, as well as various receipts and advances from the State.

ITALY.

THE CO-OPERATIVE AND MUTUAL, AGRICULTURAL, SOCIETIES IN ITALY ON 31 DECEMBER 1916. — Catalogue of these societies on 31 December 1916 published by the *Confederazione Generale delle Cooperative e Mutue Agrarie Italiane*, Rome, 1917.

From a catalogue of co-operative and mutual agricultural societies, recently published by the General Confederation of Italian Co-operative and Mutual Agricultural Societies, it appears that on 31 December 1916 there were in Italy 6,406 agricultural co-operative societies as against 5,289 on 31 December 1913, the date of the same confederation's last catalogue — and 1,347 agricultural mutual societies — as against 1,069 at the end of 1913. These 6,406 co-operative societies are distributed as follows :

Co-operative rural funds	2,725
Agricultural consortia and purchasing societies	1,567
Social dairies	1,150
Various co-operative societies	735
Co-operative enological and viticultural societies	215
Co-operative factories of superphosphates	14
Total	6,406

The greatest number of co-operative societies are in the provinces of Turin (336), Udine (342), Alexandria (302), Rome (248), Belluno (193), Brescia (188), Parma (180), and Cuneo (179).

The agricultural mutual societies are distributed as follows :

Mutual societies insuring live stock	1,085
" " " against fire	255
" " " against accidents	4
" " " (various)	3
Total	1,347

The greatest number of agricultural mutual societies are found in the provinces of Milan (200), Como (165), Turin (156), Udine (96), Novara (77) and Cuneo (67). The mutual live stock societies are scattered over almost all the provinces, and found especially in those of Milan (199), Como (164), Udine (93) and Novara (64). The mutual fire insurance societies are, on the other hand, numerous in Piedmont, the province of Turin alone having 119 of them and Alexandria 61.

Altogether the catalogue we have mentioned shows that from the end of 1913 until the end of 1916 the number of agricultural co-operative societies in Italy increased by 1,117 and that of agricultural mutual societies by 278.

RUSSIA.

THE CO-OPERATIVE SALE OF TOBACCO.

SOURCES :

- LUTZKEVITCH: Хрепчатинское товарищество. (*The Co-operative Credit Society of Chrestchatinskoe*), in "Вѣстникъ Мелкаго Кредита" (*The Messenger of Small Credit*), No 50. Petrograd, 1912.
- LIBERMAN: Табаководы и кооперативныя учрежденія (*Tobacco Growers and Co-operation*), in "Вѣстникъ Мелкаго Кредита" No. 7 Petrograd 1913.
- L.: Первая табачная кооперативная фабрика (*The First Co-operative Tobacco Factory*), in "Вѣстникъ Мелкаго Кредита" No. 14, Petrograd 1913.
- P. G.: Къ вопросу о сбытѣ табака въ Черниговскій губерніи (*On the Question of the Sale of Tobacco in the Province of Tchernigov*), in "Вѣстникъ Мелкаго Кредита" No. 19 Petrograd, 1913.
- ZINLUKIN: Табаководство и кооперація (*The Production of Tobacco and Co-operation*), in "Вѣстникъ Кооперации" (*The Messenger of Co-operation*) No. 5. Petrograd, 1914.
- A. L. Ко: Залогъ и сбытъ табаку (*Advances guaranteed by Deposits of Tobacco and its Sale*) "Вѣстникъ Мелкаго Кредита" No. 7. Petrograd, 1917.

A new and important conquest of the co-operative principle which has lately been consolidated in Russia concerns the co-operative sale of tobacco. Tobacco growing is a notable branch of agriculture in Ukraina, Southern Russia, Crimea and the Caucasus. The average area on which

tobacco is grown is 65,500 deciatines (1) and the harvest surpasses 7,500,000 puds (2) and gives means of subsistence to 316,310 families. The average area of a tobacco plantation is from 0.15 to 0.3 deciatines. The application of the co-operative principle therefore favours very small proprietors who are particularly liable to exploitation by middlemen.

The first attempt to organize the sale of tobacco co-operatively was made in 1911 in the province of Tchernigov and was followed a year later by the formation of the co-operative societies of Yalta (Crimea) and Bessarabia. In the province of Tchernigov the co-operative credit societies of Chrestchatinskoe and Rogstchevskoe began to make advances out of funds guaranteed by the deposit of tobacco, paying growers 60 per cent. of the average market price of the tobacco. Analogous operations were conducted in 1912 in the district of Yalta by the small credit fund of the Zemstvo and the co-operative credit societies of Bogatyr and Korbekly, which applied a method slightly different from that followed by the co-operative societies of Tchernigov for they left the tobacco with the growers but obliged them to insure it, so that it was withdrawn from them only at the moment of sale. In the same year similar advances began to be made in the co-operative credit society of Rjevsk in Bessarabia, which is today a true model for this branch of co-operation. It made advances guaranteed by the deposit of tobacco, and also superintended tobacco growing, employing as instructors specialists who taught members perfected methods of cultivation and introduced the best tobacco among them. In this respect the society approximated to the procedure of German co-operative societies. An interesting experiment was made in the same year in the province of Tambor in which the first co-operative tobacco factory was organized as the result of an agreement between the co-operative credit and the co-operative consumers' society of Staroe Seslavine. The consumers' society withdrew the tobacco deposited with the credit society and passed it into its factory. The factory was able to secure a strong position in the market by entering into solid commercial relations with 180 co-operative consumers' societies.

These isolated experiments, important as they sometimes were, could not seriously influence the market and sometimes quite failed to reach their object for the resistance of manufacturers and combined middlemen could not always be overcome.

The war however gave a vigorous impulse to this movement for it necessitated the formation of strong regional and district organisms.

In Siberia the co-operative credit society of Malyscevsko-Angarskoe succeeded in combining a number of co-operative societies in Pabaikal and Irkoutsk and thus creating a strong union of co-operative societies for selling tobacco.

In European Russia unions were formed in 1916 in the province of Tchernigov and Poltava where quite 3,800 villages are employed on tobacco growing and annually produce 3,379,000 puds or 45 per cent. of the total year's

(1) 1 deciatine = 2.689 acres

(2) 1 pud = 40 lbs.

harvest in Russia. The large development of co-operative credit in Poltava, where there are 251 co-operative credit societies, seventy-seven savings and credit funds, nine zemstvos' funds for small credit, four co-operative unions for small credit, six rural banks etc, in all 617 institutions of small credit, has allowed operations to be on a very large scale. The operations of the unions of Romny, Konotop, Niejin, etc., are already organized. The union of Romny has itself made advances on 100,000 puds of tobacco or nearly 10 per cent. of the total harvest of the district. Operations of this kind were begun in the districts of Lechvitzkij, Prilukskij, Romensky, Konotopski and Nejenski and in the southern districts of the province of Tchernigov.

A section of the co-operative societies have made an agreement with the consumers' co-operative societies of Moscow: they furnish their tobacco to the factory of the union which has been bought by the co-operative society of Staroe Seslavine. But this factory cannot wholly absorb what constitutes a notable part of the total product; and the decision of the tobacco manufacturers not to buy tobacco from the co-operative societies obliges these to seek another method of getting rid of their produce. Therefore the representatives of the co-operative credit societies of the district of Romny decided at their meeting that they would themselves organize a factory.

At the same time co-operation for the sale of tobacco was faced with another very important question, that of the sale of tobacco abroad, for in 1916 the representatives of the administration of the State monopoly in France began to make large purchases in the province of Tchernigov. At the meeting of representatives of the union of Romny, at which representatives of the Popular Bank of Moscow were also present, the organization for exportation abroad was discussed, that employed in exporting flax being taken as a type of that which should from 1917 onwards be applied to the tobacco trade.

UNITED STATES.

THE CO-OPERATIVE PRODUCTION AND SALE OF RAISINS IN CALIFORNIA. — C.

A. J. Murdoch, Secretary of the California Associated Raisin Company, in *The Grass Growers' Guide*, Winnipeg, Manitoba, 25 July 1917.

California is the home of the raisin industry in America and the greatest raisin producing country in the world. The Mediterranean countries are the other great areas for the production of raisins and Spain was first among them for centuries. Raisin grapes were introduced into California in 1851 but the industry had its real beginning there only in 1876. For the first six years progress was slow. In 1879 the crop first exceeded 1,000,000 pounds. In 1892 it equalled that of Spain, and was reported by the United States Department of Agriculture to be reducing the importation of foreign raisins by 20 per cent. In 1895 it amounted to more than 9,000,000 pounds; in the next year it jumped to 14,000,000 pounds; and it continued

to increase steadily until it has reached the enormous total of 180,000,000 pounds. The raisin grape is now grown on approximately 150,000 acres in California.

In the early days the growers did their own marketing individually; but companies soon organized themselves for the purposes of buying raisins from the growers, packing them and marketing them under various brand names. Competition among these companies gradually lowered the prices to growers until at last the latter were selling at less than the cost of production. The state of affairs became so unbearable that in 1912 the growers banded together and organized what is now known as the California Associated Raisin Company, an association which aims at giving such stability to the raisin market that a fair price is guaranteed to the growers. The company saved the raisin industry from ruin and has been a decided success. It is governed by a board of twenty-five trustees apportioned among five districts. These trustees, when elected in 1912, became the legal representatives of the subscribers with full power to act for them in the work of incorporating and conducting the company for seven years. The interest of each individual subscriber is shown by a trust certificate, issued to him by the trustees, transferable and entitling the holder to his proportion of dividends but to no voting rights. At the end of the seven years the trust agreement will expire, and the trust certificates will be exchanged for regular corporation stock certificates.

The trust agreement provided that \$300,000 should be subscribed before it came into force. This was done duly, about 90 per cent. of the amount being subscribed by raisin growers and the balance by business and professional men of the raisin growing district. Immediately after the company had been incorporated in 1912 the trustees and directors decided that in order to control raisin prices they must control not less than 60 per cent. of the crop for three years, with the option of doing so for further two years. After a long, hard struggle they obtained control of 76 per cent. of the crop. The company began its real work in the spring of 1913. The 1913 and 1914 crops were received, and sold and paid for in full at satisfactory prices. The 1915 crop, the largest in the history of the industry by 30,000 tons, was received and paid for at guaranteed prices. A campaign for securing contracts for crops on additional acreage was begun on 1 January 1916 and prosecuted vigorously until 1 April. It was based on a statement by the board of directors that all contracts would be surrendered and efforts to control prices abandoned if contracts for 15,000 additional acres were not signed before 1 April. The campaign was an overwhelming success. The total area under contract to the company is now about 157,000 acres, is owned by more than 8,000 growers, and represents almost exactly 90 per cent. of the acreage under raisins in the State.

The stockholders of the company now number 3,569. Its net profits up to 30 September 1915 were \$198,588.32. Out of that sum two dividends have been paid, one of 5 per cent. and one of 6 per cent., leaving a surplus of \$84,497.32. Since the 1916 crop has not yet been sold the figures for that year cannot be given.

Between 1 April 1913 and 1 April 1916 the company sold and despatched 255,233 tons of raisins together with a small tonnage of other dried fruits, and received therefor a gross sum of more than twenty-two million dollars. In the same period the company paid the growers more than seventeen million dollars, after paying the costs of handling, packing and selling the fruit.

Today the company is well supplied with warehouses and packing plant ; it has an efficient selling organization ; its " Sun-Maid " is the only nationally advertised and established brand of raisins and dried fruits. Prices have acquired a stability which they previously lacked ; speculation may be said to have been eliminated ; and the value of raisin vineyards has been enhanced.

The example of the raisin growers has encouraged the peach growers of California to organize themselves on similar lines to them. The Californian prune growers, the pea packers of Wisconsin, the cocoa-nut planters of the Philippines, and many others, are studying the company's organization and methods and trying to adapt them to their own needs.

Part II: Insurance and Thrift

UNITED STATES.

THE ORGANIZATION OF FARMERS' MUTUAL FIRE INSURANCE COMPANIES

OFFICIAL SOURCE:

UNITED STATES DEPARTMENT OF AGRICULTURE *Bulletin* No. 530. VALGREN (V. N. (Investigator in Agricultural Insurance): *The Organization and Management of a Farmers' Mutual Fire Insurance Company*. Washington, D. C., 8 May 1917.

In a recent article (1) we explained the general conditions of mutual insurance against fire in the United States and gave particular figures with regard to Illinois.

We wish here to recall only the rapidity of the progress of the companies undertaking such insurance. In some States of the Middle West fully three fourths of all insurable farm property are now insured by the farmers' own companies. Companies of this kind are found in every State except Florida, Mississippi, Louisiana, New Mexico, Arizona and Nevada. A study of the organization of these mutual associations which, while generally founded on purely empirical principles, have yielded already excellent results, is interesting. Their importance must increase, for the government of the United States must seek to provide them with a more rational basis and one which will be as much as possible uniform.

The official bulletin, which is the source of our information, describes a typical farmers' mutual fire insurance company, susceptible of modification to suit the legislation in particular States, and practising methods which in some points are an improvement on those now in use.

§ I. ORGANIZATION AND ADMINISTRATION OF THE COMPANIES.

a) *Articles of Incorporation and By-laws.* — The organization of a farmers' mutual insurance company should be preceded by a certain amount of preparatory work. The legal step of incorporation should not be taken until as large a percentage as possible of the considerable farmers in

(1) See our issue for June 1917, page 34.

the community have been interested in it. Twenty-five States now provide in a separate division of their insurance laws for the incorporation of farmers' mutual fire insurance companies. In most other States such companies can be incorporated under the laws referring to mutual fire insurance companies in general.

In any case the organizers are required to set forth, in a form usually known as the articles of corporation, the name of the proposed company, the situation of its headquarters, its purpose, its territorial sphere, its conditions of membership, an outline of the proposed form of its management, and the conditions allowing its articles of corporation to be amended.

As soon as incorporation has been accomplished a set of by-laws should be drawn up, and should describe the nature and purpose of the organization in so far as these are not contained in the articles of corporation.

The fact that a company is organized to prevent the disastrous incidence of losses does not mean that it should exempt losers from all the consequences of their losses. A reasonable part of a loss should always be borne by the loser, in order that it should be to his interest, above that of all others, that his property remain in existence, and that his strongest incentive to safeguarding it should be retained. There is otherwise a danger that a slight change in economic conditions may make it directly to his pecuniary advantage that his property be destroyed.

b) *Territorial Sphere.* — There has been on the part of legislatures in recent years a growing tendency to allow a wide territorial sphere to mutual companies. Several States now allow them to operate over an entire State. The tendency of the companies to avail themselves of this privilege has been somewhat less marked. The ambition of a company to grow by extending its territory as well as by adding to its risks within its existing territory seems natural, but there is danger that the extension will have undesirable results. In general the interest and pride taken by the community in a farmers' mutual company give it an advantage. Each individual member actively promotes the interest of the organization, is anxious to see all losers receive equal justice, is usually satisfied with a reasonable indemnity if he himself suffer a loss. The knowledge which members have of one another's character and business tends to minimize the moral hazard. An unscrupulous member, who would be quite ready to occasion loss to a large insurance company, perhaps in a distant city, is likely to hesitate before he throws loss on his neighbours. Many of the local mutual companies have done business for half a century or more without a single lawsuit. Such a record would rarely be possible except in the case of a company founded on true co-operation and attaching to itself directly the interest of the community. However if risks be confined to a limited territory an important saving is effected in the travelling expenses of directors, inspectors and adjusters.

c) *The Board of Directors and the Officers.* — Except where local conditions require a certain grouping or distribution of directors, nine directors form a board of convenient size and should be divided into three equal groups,

one of which will, in rotation, retire at the end of each year. Thus continuity is given to the board.

There are good reasons why the regular officers should generally be elected by the board from their own number. Especially is this true of the secretary and the president. The duties of the treasurer however, as ordinarily prescribed, bring him little into touch with the actual insurance business, and therefore this office may well be held by a responsible person otherwise unconnected with the company. An official or responsible employee of a local bank often makes a good treasurer. In exceptional cases it may be found expedient to elect a secretary who at the time has no farm property to insure and therefore cannot be a member of the company in a technical sense. He may, for example, be a retired farmer who has for years been an active member of the company.

The best plan probably is to provide for an executive committee responsible for all important business of a more or less routine nature. The president, secretary and vice-president properly constitute such a committee. All companies should also provide for an auditing committee, which ordinarily, and especially in the case of companies of moderate size, should consist of members of the company. An auditing committee of three should have its chairman and at least one other member chosen at the annual meeting from outside the board of directors. It may be well that the third member should be chosen by the board from their own number.

§ 2. INSURANCE TRANSACTIONS.

The most important single problem confronting a newly organized farmers' mutual fire insurance company is that of securing a sufficient number of acceptable applications for insurance within a reasonable distance of the head office. The standard applied to risks must vary with the economic development of a community. In a new or undeveloped community risks have to be accepted which could and should be rejected in one more advanced materially. The cost of insurance will therefore be higher in an undeveloped than in a developed community, but commercial rates for insurance — if commercial insurance be available on any terms — will be equally higher, and therefore the saving effected by co-operation will not be less. The requirements as to the personal character of applicants need not and should not vary.

As to who should solicit or accept applications there is a variety of opinions. In about 35 per cent. of the farmers' mutual companies one or more special agents receive all applications, and in other 10 per cent. they are received at least in part by such agents. The remaining 55 per cent. of the companies restrict the right to receive applications to the officers or to the directors and officers. The extent to which the co-operative spirit has developed in a community should be considered in deciding on a plan for securing business. It is believed however that the plan of charging the directors with this duty whenever possible will strengthen the co-

operative spirit. The plan of employing agents risks a sacrifice of the interests of the company to an effort to secure large applications and commissions. The compensation for securing business should be a fixed amount rather than a percentage of the advance charges collected: the person receiving the application will thus be left unbiassed as to valuations and the consequent amounts of insurance to be written.

The *application* should contain an accurate and fairly detailed description of the property to be insured, the proposed member's formal acceptance of the articles of incorporation and the by-laws of the company, and his agreement to meet his share of all losses and legitimate expenses. The policy or membership fee and the initial premium should be forwarded with the application to the secretary, unless there is an arrangement for a periodic settlement of accounts between the company and the person receiving the application. The application should, when fully and regularly approved by the company's representative who receives it, impose full liability on the company until it has been formally rejected or a policy has been issued. The applicant may otherwise, especially where the secretary does not give his full time to his office, be unprotected for some time after he has taken all steps incumbent on him to procure insurance.

When a conditional approval by the company's representative who receives the application is provided for in the by-laws, an application so approved should not bind the company until it has been finally accepted at headquarters. The reason for rejection should be clearly stated whenever this is practicable.

It is possible for a farmers' mutual fire insurance company to bring the average annual percentage of loss considerably below that experienced by larger commercial companies. The annual loss by fire in the United States, whether covered by farmers' mutual companies or not, is however very much higher than the average in other countries. The first and perhaps most important step towards lessening risks and eliminating preventable losses is to provide an efficient *system of inspection*.

In our previous article on farmers' mutual insurance against fire we noticed the desire of the members of the mutual companies of Illinois to render policies more uniform. The United States Department of Agriculture considers however that the advisability of requiring farmers' mutual insurance companies to use a *standard policy* for all classes of insurance may be questioned. In many instances in which the use of a standard policy has been required by State law the companies have still considered the by-laws printed on the back of the policy as constituting their true agreement with the insured. It is unquestionably essential that the agreement between a company and its members should be understood. The standard insurance policies of the various States must be admitted to be difficult reading for one not accustomed to legal phraseology. Moreover their provisions regarding factories are of no interest to farmers. These considerations have induced the legislatures in a majority of the States having legal provisions for farmers' mutual companies to exempt these companies from using the State's standard fire insurance policy.

A difference of opinion exists as to the *term of years for which a policy should be written*. A small number of the farmers' mutual companies make their policies perpetual in form; and it is claimed that permanence is thus given to a company and the expense incident to renewals saved. But the value of a given farm risk changes with the addition of new and the deterioration of old buildings and the increase or decrease of stock and machinery, and therefore a policy usually requires from time to time such changes as make it in effect a new contract. There is also a danger that if there be no specific termination of a policy, the revaluation of the property concerned will be postponed so unduly as to produce over-insurance, and consequently a bad moral hazard. The duration of the policies issued by the farmers' mutual companies varies, when it is limited, from one to ten years, but is five years in the case of more than seven tenths of the companies.

It is very important, especially in the case of a new company insuring a comparatively small amount of risks, to *limit the amount of insurance* written on one building or on a group of buildings exposed to one fire. It is perhaps safe to say that no recently organized company should attempt to write more than \$2,000 on a single risk.

Some provision for *sharing liability* for the larger risks with one or more other companies should be made, if possible, by every company. According to the plan recommended two or more companies issue separate policies for specified amounts on the same risks, care being taken that the total amount of such policies is well within the value of the insured property. The issuing companies are practically independent of each other; hence there is no need for them to have that uniformity of method or approval of one another's methods which is necessary when one company reinsures another's risks.

From the point of view of the company the insurance written should be as specific as possible. The practice of writing *blanket insurance*, that is of allowing a variety of objects to be insured by the payment of a single lump sum, is unfair both to the company and to the members who have a small amount of property to insure. In extreme instances a man has insured all his personal property on several separate farms by a single sum of insurance, thus protecting it by a payment equal to 10 or 20 per cent. of its value. A number of the farmers' mutual companies have materially reduced their rate of assessment, and at the same time made assessments more just, simply by changing the plan of giving blanket insurance to that of specifically enumerating and valuing the various kinds of property covered by a contract.

A few farmers' mutual companies limit their *liability* for indemnity to three fourths of the value of the property affected, whether the loss be total or partial. Prevailing practice, which requires full indemnity up to the amount of the insurance carried to be paid in the case of partial losses, is however followed in the department's model by-laws; mainly because the more logical plan of three fourths liability runs a risk of incurring unfair competition. It offers an opportunity to agents of competing companies

to alienate members who have suffered a partial loss by pointing out to them that another company would have paid them a greater indemnity.

The liability of the insured i. either limited or unlimited. When it is unlimited a member of an insuring company binds himself to pay his *pro rata* share of all the company's losses and legitimate expenses. Many persons have objected to this position although it is that imposed by about seven tenths of the successful companies. It is argued that the apparently impossible might come to pass, that a company might experience so many and such heavy losses that the consequent assessments would cause members who had not suffered loss by fire to go bankrupt. In fact however, when a farmers' mutual company takes a reasonable number of losses on separate farms, anything corresponding to a loss by conflagration is inconceivable. To this the only exception seems to be the case of a frontier community in which extensive prairie or forest fires are still possible.

Both the company and the insured should have the option of *cancelling* a policy. When it is cancelled on the initiative of the insured it is reasonable to charge him a short-term rate higher than the *pro rata* cost for the whole term of his policy. After such short-term rate has been deducted the balance of any advance charges he has paid should be returned to him. When however a policy is cancelled on the initiative of the company only, the *pro rata* cost of insurance for the time for which protection has been given should be deducted from any advance payments returned to the insured.

A reasonable policy or *membership fee* should be provided for in the by-laws. This fee is usually large enough at least to pay the representative of a company who receives applications and surveys risks.

Apparently many farmers' mutual companies at first levied *assessments* after each loss had been incurred and a few still adhere to this plan. It has however been found to be, in the case of fair-sized companies, needlessly burdensome to officers and needlessly expensive in that it necessitates repeated notifications and receipts to members. The members often find several calls on them in one year for small assessments to be troublesome. Other companies follow the plan of borrowing money with which to pay for losses as they occur, and levying at the end of a business year an assessment sufficient to pay the debt. An increasing number of the companies are however adopting the plan of requiring the prepayment of an initial premium at least equal to one year's average cost, and collecting at the beginning of each succeeding year for which the policy lasts an annual assessment in advance. Should it be found that funds have become exhausted some time before the next regular assessment is due, the management should not hesitate to make good the deficiency by levying a special assessment. It is important that the payment of all dues should be enforced in a business-like manner. Several companies have lost credit, and therefore members, because of their failure to levy assessments promptly and effectively.

With relatively few exceptions the farmers' mutual fire insurance companies in the United States have hitherto charged the same rate for all classes of farm property. There has been little material for a *classifi-*

tion. It has been argued that while, for example, a barn may involve a greater hazard of fire than a dwelling, each member, as a rule, owns a barn and a dwelling and there is therefore little injustice. It has been argued also that classification would involve an undesirable amount of additional work for the officers of a company, particularly for the secretary who would have to multiply the amount of insurance on each class of risk by its particular rate, and ascertain the sum of these products for each policy. In spite however of these arguments and the prevailing methods, there is, as we indicated in our previous article, an increasing and not decreasing tendency to differentiate among risks as a company progresses economically. The larger commercial companies, and such of the larger mutual companies as classify or select their risks, are making increased efforts to insure farm buildings so constructed as to reduce the risk of fire to a minimum. By making reasonable concessions when insuring in such cases a company encourages a farmer to improve his property by eliminating needless danger of fire. We will presently reproduce a suggested classification of farm property contained in the model by-laws drawn up by the United States Department of Agriculture.

There should be provisions for *arbitration* as to indemnities due. The cost of arbitration should be borne equally by the company and the insured.

The damage done to a property by fire or lightning often seems to the owner more serious than it really is. A provision that the company may satisfy a claim by building or repairing is therefore often valuable.

The question of whether a farmers' mutual insurance company should aim at establishing and maintaining a *reserve fund* leads to the question of how far it should imitate the plan now imposed by law upon all capital-stock insurance companies and, in general, larger mutual companies, the plan, namely, of maintaining a reserve proportionate to the amount of business transacted. The opinion seems to be growing among farmers' mutual companies that a reserve fund, collected by annual assessments, of about \$3,000 per million dollars of insurance in force is useful as a provision against crises.

§ 3. ESSENTIAL PROVISIONS OF THE MODEL BY-LAWS OF A FARMERS' MUTUAL FIRE INSURANCE COMPANY.

We think it useful to reproduce here the chief provisions of the model by-laws, drawn up by the Office of Markets and Rural Organization of the United States Department of Agriculture. They show the direction of the efforts of the government to encourage and guide this form of insurance.

"SECTION 2. *Property that may be insured.* — This company shall insure only farm or country property consisting of detached dwellings and their contents; farm buildings, including silos, and their contents; farm machinery; vehicles; grain and hay in bin, stack, or loft; and live stock; and detached risks of similar hazard within the corporate limits of cities or villages, not less than 100 feet distant from all other risks

in places lacking adequate fire protection, and not less than 50 feet distant in places having efficient fire protection: *Provided*, That no property of any class not considered reasonably safe by the board of directors or their representatives shall be insured: *And provided further*, That old and dilapidated structures, buildings wherein fire is used and the flues are defective or dangerous, paintings, jewelry, money, or securities or other evidences of ownership or of credit, shall in no case be insured by this company ”.

“ SECTION 9. *Special inspection of property.* — At least once every three years the property insured shall be thoroughly inspected by a competent person employed by the company as special inspector. Said inspector shall carefully examine the flues of all dwellings or other buildings wherein fire is used, note the placing and the condition of stoves and fireplaces and the disposition of ashes therefrom, enquire into the system or method of lighting buildings, examine all lightning rods, and ascertain if fences are properly grounded. He shall take careful notice of any and all defects or dangerous practices. He shall also note the presence or absence of means of combating a fire, such as readily available water supply, or chemical extinguishers, and suitable ladders by means of which the top of the roof can be quickly reached. He shall advise with the insured concerning the general improvement of the risks, and shall recommend specific measures for the removal of conditions materially increasing the hazard thereof. He shall report to the company, upon blanks furnished him for that purpose, the condition of each member's risk or risks, together with the recommendations, if any, made by him for the removal of dangerous conditions. Refusal or neglect on the part of the insured to carry out specific recommendations of the inspector may, in the discretion of the board of directors or their representatives, be made cause for the cancellation of his policy or policies ”.

“ Section 10. b) *Limits to the amount of insurance.* — The directors of this company shall exercise due care to prevent the insurance of any property for more than three fourths or less than one half of the cash value of the property: *Provided*, That until the company has \$500,000 of insurance in force no single risk or group of property subject to one and the same fire shall be insured for an amount greater than \$1,500, nor shall such maximum single risk exceed \$2,000 until the company has \$1,000,000 of insurance in force, nor shall it later exceed two tenths of 1 per cent of the insurance in force: *And provided further*, That the insurance placed on live stock shall not exceed an amount per head of \$200 on horses, \$60 on cattle, \$15 on hogs, and \$10 on sheep ”.

“ h) *Sale of property and transfer of policy.* — The sale of insured property shall immediately suspend the insurance thereon, and unless application for transfer of the policy is received and accepted within 10 days after the date of sale, the policy shall be cancelled. A policy may be transferred or assigned by obtaining the consent of the company and paying a fee of 50 cents ”.

" Section 12. *Fees and assessments.*

" a) *Policy fee and initial premium.* — A policy fee of \$1.50 and an initial premium to be fixed by the board shall be paid by the applicant, or satisfactory security for their payment shall be given by him, at the time of making application for insurance. For additional insurance a member shall be charged, in addition to the initial premium, a policy fee of 75 cents when the additional insurance applied for is \$500 or less, and \$1.50 when the sum applied for is greater than \$500.

" b) *Regular assessment.* — Not later than October 20 of each year the board of directors shall determine the rate of assessment for that year, basing such rate upon past experience as to the needs of the company. Said assessment shall be due on or before November 30 of the same year. Policies written on or after December 1 of the previous year and before June 1 of the current year shall be subject to the regular assessment of the current year and to three succeeding regular annual assessments. Policies written on or after June 1 of the current year and before December 1 of the current year shall be exempt from the regular annual assessment of that year, but shall be subject to four succeeding regular annual assessments.

" c) *Special assessments.* — Should unexpectedly heavy losses occur which cannot be met by the funds on hand, supplemented at the discretion of the board of directors by a sum not exceeding two tenths of 1 per cent. of the insurance in force, which may be borrowed, a special assessment shall be levied on all policies in force at the time of such loss or losses "

" Section 14. *Classification.* Property insured by this company shall be classified as follows, the contents of buildings taking the same classification as the building in which they are kept: *Provided*, That the board of directors shall have power to prescribe rules under which kinds of property not specifically hereinafter enumerated may be placed in one or the other of the following classes, or in additional classes created by the board.

Class A. — Brick or stone dwellings with roof of slate, metal, or other non-combustible material, when properly rodded against lightning.

Class B. — Brick or stone dwellings with wooden roof, when properly rodded.

Wooden dwellings with roof of non-combustible material, when properly rodded.

Unrodded brick or stone dwellings with roof of non-combustible material.

Class C. — Wooden dwellings with wooden roofs, when properly rodded. Unrodded brick or stone dwellings with wooden roof.

Unrodded wooden dwellings with roof of non-combustible material.

Granaries, corn cribs, and hog houses located not less than 100 feet from the dwelling, nor less than 50 feet from the barn, such buildings being properly rodded in all cases where the insurance applied for is \$200 or more.

Live stock not pastured during the summer months except where all fences are properly grounded.

Class D. — Barns properly rodded.

Unrodded wooden dwellings with wooden roofs.

Granaries, corn cribs, and hog houses located nearer the dwelling or the barn than as specified for Class C, or lacking the lightning protection required for that class.

Live stock pastured during the summer months where fences are not properly grounded,

Class E. — Unrodded barns and other property deemed to be of similar hazard ”.

It is proposed that the coefficient representing the amount of risk attaching to each of these classes of property should be 15 for A, 20 for B, 25 for C, 33 for D and 40 for E.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND TRHIFT IN VARIOUS COUNTRIES.

CANADA.

AGRICULTURAL, INSURANCE IN ALBERTA IN 1916. *Canadian Finance*, Vol. VIII,
No. 16, Winnipeg, 15 August 1917.

The following are some data as to the chief categories of agricultural insurance in Alberta and show the business in 1916 of the companies insuring live stock, and insuring against the injury done by tornadoes and by hail. The mutual fire insurance companies have not yet furnished reports.

I. Companies Insuring Live Stock 1916.

	Premiums	Indemnities
General Animals Insurance Company	4,396	1,015
Great North Insurance Company	8,284	3,673
Hartford Fire	200	—
Yorkshire Insurance Company	4,153	3,977
Total 1916	17,033	8,665
Total 1915	18,334	9,724

II. Companies Insuring against Tornadoes 1916.

	Premiums	Indemnities
Aetna Insurance Company	44	nil
Fidelity Phenix Insurance Company	124	nil
Firemen's Insurance Company of Newark	124	nil
German-American Insurance Company	44	nil
Hartford Fire Insurance Company	250	15
Home Insurance Company of New York	101	49
National Fire of Hartford	3	nil
National Union Fire Insurance Company	105	nil
New York Underwriters	104	nil
Nova Scotia Underwriters	40	nil
St. Paul Fire and Marine Insurance Company	165	85
Scottish Union and National Insurance Company	60	nil
Springfield Fire and Marine Insurance Company	163	7
Total 1916	1,327	156
Corresponding totals for 1915	489	1,292

III. Companies Insuring against Hail 1916.

	Net Premiums	Indemnities	Expenses
Acadia Fire	622	nil	93
British Crown	112,416	101,721	45,718
British America	46,124	39,786	14,000 estimate
Canada Hail	44,171	42,782	13,200
Canada Security	233,320	180,792	54,212
Western Underwriters of Canada Security.	30,195	18,365	5,048
Canada Weather	39,680	36,284	11,700
Connecticut	30,170	13,988	10,000 estimate
Dominion Fire	2,507	1,528	668
Excess Insurance Company	46,322	37,327	14,000 estimate
Great North	69,307	36,858	15,036
Hartford	27,351	29,480	8,223
Home Insurance Company	163,897	148,987	46,435
Nova Scotia Fire Under- writers	57,038	48,254	14,492
North Western National .	56,258	52,270	16,800 estimate
Rochester Underwriters .	35,388	30,478	11,764
St. Paul Mutual Hail . .	110,936	89,574	33,294
United Assurance Company	42,625	31,066	11,936
Westchester Fire	61,770	73,731	18,300 estimate
Winnipeg Fire Underwriters	27,253	16,713	6,821
Total 1916	1,237,350	1,029,984	351,740
Corresponding totals for 1915	1,119,816	855,643	—

GERMANY.

1. THE DAMAGE CAUSED BY HAIL IN WURTEMBERG IN 1916. — *Wallman's Versicherungs-Zeitschrift*, 51st year, No. 89, Vol. II, Berlin, 16 August 1917.

Hail fell on thirty-seven days in 1916, and on thirty-three of these days it injured crops. All districts were attacked except those of Besigheim, Neckarsulm, Tuttlingen and Aalen, and 624 communes and parts of communes in the sixty districts. In ten districts and fifty-nine communes the damage caused by hail was such that there was an official valuation of losses with a view to a remittance of the land tax. The data as to losses thus obtained are as follows. The whole area which suffered measured

6,104 hectares as against an average of 4,853 hectares for the decade 1906 to 1915. The cash value of the losses reached 5,009,698 marks as against an average of 2,427,934 for the same decade. The average value of the losses incurred on a hectare of land under crops entirely destroyed was 821 marks, this average having been 500 marks from 1906 to 1915. The amount of land tax remitted was 8,037 marks. The districts which suffered most were those of Saulgau and Marbach, where the value of the losses was 3,702,085 marks or 73.9 per cent. of their total value.

2. A MEMOIR ON THE TRANSFERENCE TO THE STATE OF THE INSURANCE OF LIVE STOCK RAISED FOR SLAUGHTER. — *Illustrierte landwirtschaftliche Zeitung*, 37th year, No. 62, Berlin, 4 August 1917.

The Ministry of Agriculture and of the Domains and Forests of the Empire has remitted to the Prussian Chambers of Agriculture a memoir on the foundation of public institutions for the insurance of live stock kept for slaughter in the provinces of Prussia. The scheme will be realized by means of the Prussian federations concerned with trade in live stock. Owing to their public position in the trade in butchers' stock they have been obliged to supersede the farmer, in so far as his responsibility for the chief deficiencies in the stock he sells is concerned, in accordance with the *Gewährschaftsverordnung* (Guaranteeing Ordinance) of 27 March 1899. In virtue of their rules for interior administration they did in fact assume this responsibility. If they are now to receive the additional duty of assuming responsibility for the other deficiencies of butchers' live stock, following henceforth the principles of the technique of insurance, they will make another step towards transferring insurance of this kind to the State. The third and last stage will consist in transferring to the provincial or State administration the organization as it shall have been formed and financially consolidated by the activity of these federations concerned with trade in live stock.

The new insurance of butchers' live stock by the federations in this trade will easily work more profitably than that by private organizations. Costs of administration will reach at most a total of 10 per cent. of premiums in the case of the federations, whereas in that of private organizations 25 per cent. must be allowed for them.

When these federations are released from this duty care will be taken that the premium to be paid by the farmer be not increased and that their supplementary payments be not lacking. Their contribution will fall the more easily into line because it is equal to the product of the sums already engaged in the enterprise, leaving out the amount of the reserves passing to the new administration.

SWITZERLAND.

THE SWISS SOCIETY OF AGRICULTURE AND INSURANCE AGAINST THE ACCIDENTS OF AGRICULTURE IN 1916. — *Jahresbericht des Schweizerischen landwirtschaftlichen Vereins* 1916. Brugg, 1917.

The yearly report of the Swiss Society of Agriculture for 1916 (1) has just appeared. Before we notice, as we have done in previous years (2), the matter in this report especially concerned with insurance against the accidents of agriculture, we will give some facts regarding this society.

It was founded in 1863 and arose from the fusion of the Society of Swiss Agriculturists and the Swiss Central Society of Agriculture. It is concerned with the general interests of agriculture and is responsible for the distribution of federal subsidies. It practises some special forms of activity, such as insurance against accidents, the experimental organization of cultures, the importation of hogs, etc. Its organ is the "Schweizerische landwirtschaftliche Zeitschrift".

At the end of 1916 it comprised twenty-nine sections and 62,390 members. At the end of 1915 the members numbered 60,967; and the increase in the ensuing year was therefore one of 1,423. The Federation of Swiss Goat-keeping Consortia left the society on 31 December 1914 but rejoined it on 9 December 1916; and therefore the Federation of the Goat-keeping Consortia of Zurich, which joined the society in 1915, no longer appears as an independent branch.

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As regards insurance against the accidents of agriculture we should note that while in the two years before 1916 a continuous diminution is found in the number of insured persons, in 1916 insurance again began to increase to a remarkable degree.

In 1916 there were insured:

4,403 men,
113 women,

in all 4,516 persons, of whom 1,035 were employers, 444 members of families (417 men and 27 women) and 3,037 employees and journeymen labourers (2,951 men and 86 women). In addition 491 farms were insured. The total number of the insured was thus 5,007 as against 4,829 in 1915, giving an increase of 178.

(1) *Jahresbericht des Schweizerischen landwirtschaftlichen Vereins*, 1916, Brugg, 1916, pp. 59.

(2) See for the report for 1915 our issue for October 1916.

As regards the duration of insurance :

3,790 insurances were for 12 months

413	"	"	"	9	"
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328	"	"	"	6	"
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62	"	"	"	3	"
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414	"	"	"	2-1	"
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(journeymen labourers).

Altogether 97,294.10 francs were paid for premiums and supplements for medical and pharmaceutical expenses.

Accidents numbered 541 and the victims were distributed as follows : 176 employers, 29 members of families, and 336 servants, journeymen workmen and other employees.

Of these 541 accidents, 428 were verified during 1916 and the society disbursed for them, on indemnities and medical expenses, 55,402.65 francs. For the 119 cases still pending 36,600 francs have been reserved. Expenses of administration amounted to 11,945.50 francs.

In 1916 the question of a voluntary union with the Swiss Institution of Insurance against Accidents could not be decided owing to the war. For the same reason this institution had to put off indefinitely the beginning of its labours. The reaction of the war on the economic life of the country both prevented the cantons in which the Swiss Society of Agriculture is active from introducing compulsory insurance against sickness, and prevented the agriculturists of the federations which unite in their society from founding special rural agricultural sickness funds.

Part III: Credit

RUSSIA.

THE ACTIVITY OF THE PEASANTS' LAND BANK (*Conclusion*).

§ 5. THE ADMINISTRATION OF THE BANK'S PROPERTY.

In 1915 the bank administered 2,621,640 deciatines (1) of land, distributed as follows according to the method of their administration.

TABLE XV. — *Distribution of Lands Administered by the Peasants' Land Bank according to the Method of Administration.*

System of administration	Properties bought by the peasants — deciatines	Properties emanating from the crown — deciatines	Properties expro- priated because of unextin- guished mortgages — deciatines	Total — deciatines	Percentage — of total
1. Properties (a) to peasants . . let for rents . . (b) to contractors .	883,007	762,203	127,863	1,773,073	61.9
2. Properties let to peasants for rents partly payable in kind	50,363	95,544	5,311	151,218	5.3
3. Properties administered by their former proprietors . .	18,837	1,418	2,486	22,741	0.8
4. Properties administered by the bank directly	40,518	405	—	40,923	1.4
	701,513	61,382	72,625	835,520	24.2
Total . . .	1,731,877	922,621	208,956	2,863,454	100.0

As appears from this table the method of administering the lands preferred is that of letting them to the peasants, to whom 1,795,814 deciatines were thus ceded. In letting lands the bank first considers the peasants

(1) 1 deciatine = 2.698 acres.

who need them. Most frequently a lease does not last beyond the harvest for longer leases would interfere with the bank's enterprise of selling properties which it is pursuing with success.

The extent of the woods owned by the bank was 657,439 deciatines on 1 January 1915 and yielded a profit of 3,963,878 roubles (1) in which payments made in previous years for woods sold were included.

It should be noted that the profits derived from the bank's lands were 5,823,361 roubles, or 4.1 per cent. of the capital spent on buying properties, as against 4.6 per cent. in 1914 and 4.4 per cent. in 1913.

§ 6. THE BANK'S LOANS TO PEASANTS FOR THE PURCHASE OF LANDS BELONGING TO INDIVIDUALS.

The bank's intervention in sales of land by individuals lessened noticeably in 1915 even as compared with 1914. Requests for loans numbered only 2,456 as against 11,387 in the previous year. The loans granted numbered 5,720 as against 12,798 in the previous year.

In its third period of activity these operations of the bank were as follows :

(1) 1 rouble = about 2s 1 ½ d. at par.

As appears from this table 5,239,234 deciatines were bought by the peasants with the help of the bank. The bank lent to the purchasers 554,774,555 roubles secured by mortgages of the land. The greater part of this enormous area was bought from the hereditary nobility, who constituted the following percentages of the sellers of land :

TABLE XVII. — *Percentages of Sellers formed by Nobles.*

1908	1909	1910	1911	1912	1913	1914	1915
77.5	75.8	74.9	73.4	69.8	71.7	65.4	55.5

In this as in preceding years applications were received from individuals who wished to sell their land to the peasants, and wished it to be organized as *outroub* and *houlor* before it was sold.

In the third period 1,112 applications were made, covering an area of 559,396 deciatines, out of which 667 properties having an area of 243,790 deciatines and a total value of 37,956,242 roubles were organized.

The following table gives a complete idea of these transactions :

TABLE XVIII. — *Preparation of the Lands of Proprietors for Sale to the Peasants.*

Year	Applications of individuals for sale of their lands to the peasants		Approved schemes for the division of lands into <i>houlor</i> and <i>otroub</i>		Land divided into <i>houlor</i> and <i>otroub</i> for sale to peasants								Total value estimated by the Bank of Agriculturists — roubles
					Relation between total area and area of <i>houlor</i> and <i>otroub</i>								
					<i>Houlor</i>				<i>Otroub</i>				
	Number of application	Total area of lands — deciatines	Number of properties	Area — deciatines	Number	Area — deciatines	Number	Area — deciatines	In collective property — deciatines	Area of divided property — deciatines			
1909 . . .	199	153,538	84	53,474	42	633	7,341	679	8,557	717	16,613	1,667,928	
1910 . . .	354	139,839	277	22,657	201	1,751	22,514	5,121	42,785	3,717	69,016	11,886,146	
1911 . . .	212	121,116	173	76,363	198	2,172	31,082	4,263	34,905	2,681	68,668	11,035,504	
1912 . . .	114	41,151	84	27,312	89	1,306	20,079	1,678	12,423	588	33,090	4,707,666	
1913 . . .	133	52,170	96	32,265	78	760	13,629	1,220	10,085	535	24,249	3,011,910	
1914 . . .	86	44,515	62	25,293	41	506	9,500	962	7,684	822	18,006	2,888,952	
1915 . . .	14	6,647	12	5,789	18	534	8,495	395	4,239	1,352	14,086	2,728,130	
Total	1,112	559,396	768	295,155	667	7,462	112,640	14,327	120,698	10,412	243,790	37,956,242	

These lands were sold to the following categories of purchasers :

TABLE XIX. — *Categories of Purchasers.*

Categories	Percentage of total sum of loans granted to each category									
	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
Individuals	18.7	18.5	28.4	62.1	76.1	82.8	82.9	80.8	76.1	73.2
Rural Societies	68.3	66.2	60.4	34.7	22.3	16.4	16.2	18.4	23.0	25.6
Rural Communes	13.3	15.3	10.7	3.2	1.6	0.8	0.9	0.8	0.9	1.2

Categories	Percentage of total area of lands bought by each category.									
	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
Individuals	1.5	1.6	3.8	10.4	19.6	30.3	35.2	35.2	31.9	28.4
Rural Societies	63.4	60.7	68.8	76.1	64.9	63.3	59.8	59.7	64.1	63.5
Rural Communes	35.1	37.7	27.4	13.5	15.5	6.4	5.0	5.0	4.1	8.1

As is seen from this table the number of transactions with individuals increased progressively as did also the area sold as private property. But the peasants, being much freer in their purchases, prefer to buy property which they can make collective. At the bank's request they determine in detail the share belonging to each member of a society so formed.

Most of the land sold to peasants as private property was in the form of lots largely in excess of the average area of peasant holdings, both in all Russia and in its various districts. Thus the following table shows that more than half the purchases were of areas of from ten to fifty deciatines.

TABLE XX. — *Percentage of Lands Bought belonging to the Various Categories of Area.*

Year	Up to 10 deciatines	From 10 to 20 deciatines	From 20 to 50 deciatines	More than 50 deciatines	Total
1910	29.0	25.2	30.3	5.5	100.0
1911	35.9	32.1	28.9	3.1	100.0
1912	33.9	29.9	31.1	5.1	100.0
1914	26.3	31.1	38.9	3.8	100.0
1915	23.5	30.0	43.1	3.4	100.0

During the third period loans amounting to 885,679,291 roubles were granted and were used to buy 7,979,570 deciatines.

TABLE XXI. — *Loans for the Purchase of Properties.*

Loans for the Purchase of Lands of Individuals			
Year	Number of applications for loans	Total area of bought land — deciatines	Amount of loans granted — roubles
1905	3,263	396,403	31,031,405
1906	3,115	522,751	54,309,290
1907	5,379	932,849	107,831,578
1908	19,377	1,019,014	116,283,714
1909	50,719	1,227,114	144,497,534
1910	69,710	1,549,720	169,558,320
1911	24,778	717,979	73,319,710
1912	20,567	545,626	54,926,610
1913	18,015	484,023	9,096,2204
1914	12,798	383,331	38,142,040
1915	5,720	200,760	16,682,870
Total	223,441	7,979,570	885,679,291

§ 7. MORTGAGES ON LANDS BOUGHT WITHOUT THE HELP OF THE BANK OF AGRICULTURISTS.

During 1915 there were made to the bank 378 applications for loans for lands bought without its aid, for the payment of mortgages amounting to 1,710,311 roubles. The number of applications was four times less than in 1914 and the area they concerned three and a half times less.

The bank was able to lend 1,312,270 roubles on mortgages on 16,217 deciatines of the value of 1,931,860 roubles.

In the third period loans granted to pay debts burdening land bought without the bank's help amounted to 50,085,773 roubles secured by mortgages on 695,190 deciatines.

TABLE XXII. — *Mortgages on Lands Bought without the Bank's Help.*

Year	Total number of loans	Total area of mortgaged lands	Loans granted Roubles
1896-1901	1,530	142,632	7,250,893
1906	86	6,631	451,910
1907	234	19,914	1,738,470
1908	937	40,078	3,763,065
1909	1,849	76,294	5,513,545
1910	2,603	117,840	8,792,370
1911	2,557	101,356	7,591,580
1912	1,996	81,037	6,628,120
1913	1,758	62,931	4,928,510
1914	1,043	35,225	2,902,690
1915	174	5,802	516,650
Total . . .	14,787	695,190	50,085,775

§ 8. MORTGAGES ON NADIEL LANDS.

The activity of the bank in its third period is closely connected with the law of 15 November 1906 which allowed loans to be granted secured by mortgages on the *nadiel* lands which had previously been inalienable.

Many hopes were founded on this law. It was thought that the power to mortgage *nadiel* lands would give a strong impulse to colonization in Siberia, in that it would furnish money to peasants wishing to move to other districts, and that it would encourage the improvement of land, increase purchases, and intensify the movement of property.

But this law did not in fact have a wide application. In 1915 there had been 1108 applications for loans for a sum of 1,379,530 roubles secured by 14,658 deciatines of land. The bank approved 930 of these loans for a sum of 851,520 roubles, and 11,507 deciatines, worth 1,571,356 roubles, were mortgaged.

In the third period 9,720 loans were made of a sum of 10,948,770 roubles, and 284,712 deciatines were mortgaged, as appears in the following table :

TABLE XXIII. — *Loans on Nadiel Lands from 1907 to 1915.*

Year	Number of loans	Area of mortgaged lands — deciatines	Sums lent — roubles
1907	47	32,164	504,570
1908	153	36,150	765,060
1909	952	53,945	1,089,050
1910	1,113	45,659	1,213,080
1911	1,083	23,437	1,116,350
1912	1,383	23,940	1,078,400
1913	1,736	28,416	1,755,910
1914	2,170	25,409	2,346,360
1915	1,078	15,636	1,079,920
Total	9,720	284,752	10,948,700

It is interesting to distribute the loans according to their objects, as these were declared in the applications made to the bank. As appears in the following table the largest sum, namely 3,388,440 roubles, was intended for the purchase of lands; a less sum — 1,674,930 roubles — for the conversion of collective into private property; and only 655,030 roubles for the improvement of the cultivation of the lands.

TABLE XXIV. — *Objects for which Loans were Requested.*

Year	Purchase of nadiel of peasants moving elsewhere			Establishment of houlour			Agricultural improvements			Total		
	Num- ber of loans	Total area of mort- gaged lands — deciatines	Amount of loan — roubles	Num- ber of loans	Area of land — deciatines	Amount of loans — roubles	Num- ber of loans	Area of land — deciatines	Amount of loans — roubles	Num- ber of loans	Area of land — deciatines	Amount of loans — roubles
1907 . .	16	2,320	21,120	31	29,841	483,450	—	—	—	47	32,164	504,570
1908 . .	78	29,493	362,060	35	15,171	395,000	40	486	8,000	133	36,150	765,060
1909 . .	541	34,970	646,890	203	15,883	377,060	208	3,083	65,100	952	53,945	1,089,050
1910 . .	517	36,287	932,470	282	5,937	174,760	314	4,415	104,850	1,113	45,659	1,213,080
1911 . .	554	12,883	781,130	42	2,397	95,930	487	8,133	239,290	1,083	23,437	1,116,350
1912 . .	627	5,872	508,950	36	4,338	137,460	427	7,335	220,870	1,087	17,549	866,780
1913 . .	147	3,535	100,780	6	234	10,670	47	731	13,470	206	4,500	124,920
1914 . .	13	289	29,490	—	—	—	16	152	3,750	29	441	33,240
1915 . .	9	53	14,550	—	—	—	1	9	200	10	62	4,750
Total .	2,602	116,714	3,388,440	6,351	73,821	1,674,930	1,537	23,368	655,030	4,674	213,903	5,717,800

In addition loans for a sum of 5,230,900 roubles were granted under the law of 1912. During four years 1660 loans amounting to 2,002,740 roubles were granted and the mortgages affected 15,435 deciatines. For the amortization of debts contracted in buying lands without the bank's support 496 loans amounting to 415,240 roubles were made and 4,574 deciatines were mortgaged. For the purchase of lands with the bank's support 215 loans, amounting to 554,610 roubles, were made and were secured by mortgages on 10,795 deciatines. In addition there were 503 loans, amounting to 918,310 roubles and secured by mortgages on 8,041 deciatines for the purchase of *nadiels*. For the establishment of *houters* there were 2,112 loans amounting to 1,340,000 roubles and secured by mortgages on 31,004 deciatines. Thus from 15 November 1906 to 1 January 1916 loans numbered 9,720 amounted to 10,948,700 roubles and involved the mortgaging of 283,752 deciatines of *nadiel* land.

The sum of 655,030 roubles granted for agricultural improvements should be noticed. It is relatively small but it represents a new direction in which the bank's activity has been applied since the first and second periods. Until this third period the insufficient area belonging to the peasants — an insufficiency which was already being combated — found no compensation in an attempt to increase production. The bank's attention was given almost entirely to selling land to the peasants. It was in the third period that measures were taken to realize this new aim, a fact explained by the necessity of restraining the liquidation of lands belonging to individuals. It was necessary to satisfy the peasants not only by increasing the area of their land but also by intensifying its production.

§ 9. TOTAL RESULTS OF ALL THE BANK'S LENDING TRANSACTIONS.

In the whole period of its activity the bank has made 398,030 loans for a total sum of 1,518,335,649 roubles, secured by mortgages on 17,737,198 deciatines of the total value of 1,894,758,033 roubles.

These loans were distributed as follows: 312,051 of 494,819,599 roubles were made to proprietors and secured by mortgages on 4,244,449 deciatines valued at 575,453,558 roubles; 75,668 of 799,682,267 roubles, secured by mortgages on 10,391,422 deciatines valued at 1,052,751,439 roubles, were to co-operative societies; and 10,291 of 226,883,783 roubles, secured by mortgages on 3,101,327 deciatines valued at 266,553,036 roubles, were to rural communities. Thus 23.9 per cent. of these loans went to individual landowners, 58.1 per cent. to co-operative societies and 17.5 per cent. to rural communities.

The relatively small percentage representing the loans to individuals is a result of the bank's method before its third period of activity. In its third period individuals had the first place; for from 1911 to 1915 there passed into private ownership 2,517,653 deciatines, or 59.3 per cent. of the total area bought by the bank in the whole period for which it had been active, namely from 1885 to 1915.

§ 10. ECONOMIC POSITION OF PEASANTS ACQUIRING LAND FROM THE BANK OR FROM INDIVIDUALS BY MEANS OF THE BANK.

An analysis of the economic position of the peasants at the time they buy lands belonging either to the bank or to individuals is of the highest interest.

In 1915 the position of the peasant purchasers of the bank's lands was as follows:

TABLE XXV. — *Economic Position of the Peasant Purchasers of the Bank's Lands.*

Economic Position	Purchasers of the Bank's Lands							
	Number				Percentage			
	Total	Indi-viduals	Co-ope-rative societies	Rural commu-nities	Total	Indi-viduals	Co-ope-rative societies	Rural commu-nities
without lands	2,102	1,801	125	176	18.6	28.1	10.7	4.8
having less than 1.5 deciatines . .	1,792	859	182	751	15.9	13.4	15.6	20.3
having from 1.5 to 3 deciatines . .	1,704	1,017	174	513	15.1	15.9	14.9	13.9
having from 3 to 6 deciatines . .	2,205	1,264	212	729	19.6	19.7	18.0	19.7
having more than 6 deciatines . .	3,471	1,469	476	1,526	30.8	22.9	40.8	41.3
having less than 3 deciatines . .	5,678	3,677	481	1,440	49.6	57.4	41.2	39.0
having more than 3 deciatines . .	5,676	2,733	688	2,255	50.4	42.6	58.8	61.0
Total . . .	11,274	6,410	1,169	3,695	100.0	100.0	100.0	100.0

This table shows that most of the purchasers were landless purchasers or owners of small lots.

The following table shows their position in the third period of the bank's activity more clearly and year by year.

TABLE XXVI. — *Percentages of the Purchasers of the Bank's Lands in Stated Economic Positions from 1906 to 1915.*

Economic Position	1906	1907	1909	1910	1911	1912	1914	1915
without land	18.6	13.2	19.7	18.8	24.5	19.1	18.2	18.6
less than 1.5 deciatines	27.3	38.5	16.6	17.0	13.1	13.2	13.1	15.9
from 1.5 to 3 deciatines	15.1	29.8	19.9	17.8	16.5	16.8	14.9	15.1
from 3 to 6 deciatines	21.1	14.7	23.4	23.3	22.2	23.0	22.8	19.6
more than 6 deciatines	17.9	3.8	20.4	26.1	23.7	25.9	31.0	30.8
less than 3 deciatines	61	81.5	56.2	50.9	54.1	51.1	46.2	49.6
more than 3 deciatines	39	18.5	43.8	49.1	45.9	48.9	53.8	50.7

Unfortunately, as the statistics of the zemstvos show, these data do not represent the real position of the purchasers or their true economic resources. Many peasants are in easy circumstances because while they own only very little land they lease other land. Statistics as to live stock, and especially as to animals employed on field-work, also do not allow of exact conclusions, for a system exists very commonly of tilling leased land with animals belonging to the owner. The data are however those which come nearest to expressing the economic position of the peasants who acquire the lands. The following table shows the measure in which the peasants are able to cultivate the land they buy with their own resources.

TABLE XXVII. — *Resources in Live Stock of Purchasers of the Bank's Lands.*

Purchasers	Total number of peasant purchasers	Percentage of purchasers having					Total live stock of purchasers				Average live stock of purchasers		
		no live stock	no draught animals	horses			horses	cattle	cows	sheep	draught animals	cows	sheep
				1	2	3 & more							
changing their place of residence	6364	5.9	8.8	34.1	29.2	22.0	10,718	1,410	11,688	34,665	211	195	579
not changing their place of residence	4910	6.3	5.1	26.9	36.6	25.1	9,418	1,029	9,853	27,949	228	214	608
such of above as change within the same province	3733	4.9	4.5	28.2	36.8	25.0	7,226	864	8,022	24,635	227	226	680
change to another province	1177	10.9	6.8	22.7	36.0	23.6	2,192	165	1,831	3,814	235	175	364

It appears from this table that the total number of the purchasers having live stock is much superior to that of the landless purchasers, and this confirms our previous statement, and allows the conclusion that most of the lands passed to peasants whose prosperity was above the average.

The position would be more clearly shown if we could give data showing not the land and live stock owned but the area cultivated by the purchasers.

The total number of peasants who, with the bank's support, bought land from individuals was 32,108, and of these 3,820 or 11.9 per cent. had previously no land. The 28,988 others owned 205,038 deciatines or an average of 7.2 deciatines for each purchaser.

TABLE XXVIII. — *Economic Position of the Purchasers of Land of Individuals.*

Economic Position	Purchasers of lands belonging to I							
	Number				Percentage			
	Total	Indi-vidu-als	Co-ope-rative societies	Rural commu-nities	Total	Indi-vidu-als	Co-ope-rative societies	Rural commu-nities
without land	3,820	1,125	2,522	173	11.9	26.9	12.4	2.3
less than 1.5 deciatines	2,433	240	1,383	810	7.6	5.7	6.8	10.8
from 1.5 to 3 deciatines	4,248	428	2,708	1,112	13.2	10.2	13.2	14.8
from 3 to 6 deciatines	9,358	844	5,402	2,112	29.1	29.1	26.5	41.4
more than 6 deciatines	12,249	1,550	8,394	1,305	38.2	37.0	40.1	31.6
less than 3 deciatines	10,501	1,793	7,013	2,095	32.7	42.8	32.4	27.9
more than 3 deciatines	21,607	2,394	13,796	4,417	67.3	57.2	67.6	72.1
Total	32,108	4,187	20,409	5,512	100.0	100.0	100.0	100.0

These figures do not, any more than those of the preceding table, give an entirely exact picture of the position. They give an exaggerated idea of the number of needy peasants, as does also the table which covers the whole of the third period.

TABLE XXIX. — *Percentages of the Purchasers of the Land of Individuals in Stated Economic Positions from 1906 to 1915.*

Economic Position	1906	1907	1909	1910	1911	1912	1914	1915
without land	9.4	8.2	9.2	11.6	13.1	12.2	13.0	11.9
less than 1.5 deciatines	33.2	41.2	9.9	10.3	10.3	9.6	6.7	7.6
from 1.5 to 3 deciatines	30.5	33.3	17.4	18.5	17.4	14.7	13.1	13.2
from 3 to 6 deciatine	19.9	13.9	28.7	27.7	27.1	26.3	25.7	29.1
more than 6 deciatines	6.9	3.4	34.8	32.9	32.1	37.2	41.5	38.2
less than 3 deciatines	73.2	82.7	36.5	39.4	40.8	36.5	32.8	32.7
more than 3 deciatines	26.8	17.3	63.5	60.6	59.2	63.5	67.2	67.3

It is a fact of the highest interest that among purchasers of lands the number of well-to-do peasants increases progressively. The bank's support goes more and more to peasants who represent economically the average peasant middle class.

Not only does the bank prefer to aid peasants in comparatively easy circumstances, but its help tends to form a true peasant middle class.

Thus, as the following table shows, the economic position of the buyers was radically changed after their purchase of lands.

TABLE XXX. — *New Position of Purchasers of the Bank's Lands.*

Year	Area belonging to the peasants after their purchases of the bank's lands						
	less than 1.5 deciatines %	less than 3 deciatines %	less than 6 deciatines %	less than 9 deciatines %	less than 15 deciatines %	less than 25 deciatines %	more than 25 deciatines %
1909	1.8	5.2	14.2	16.6	28.5	18.7	5.9
1910	2.3	4.1	9.7	12.7	31.0	28.7	11.5
1911	2.1	2.8	9.4	12.4	24.8	31.5	17.0
1912	2.4	4.1	11.4	12.5	26.4	29.2	14.0
1913	4.1	3.2	9.7	11.2	21.4	30.0	20.4
1914	3.0	2.3	9.9	12.3	20.1	30.4	22.0
1915	5.0	7.1	9.3	10.8	19.6	28.4	19.8

It follows from this table that the percentage of the buyers whose economic position brings them near the true rural middle class increases progressively. We cannot but recognize that the bank has succeeded in forming this new class of society, on which the government thought it could count as on the support of order and of the preservation of existing conditions.

The same deduction can be made from the table which gives the total area belonging to peasants after they had, by means of the bank's support, bought lands belonging to individuals. The percentage and number of peasants who thus become members of the rural middle class increases progressively, although the percentage is slightly less than that of the peasants who have reached this position by buying lands from the bank directly.

TABLE XXXI. — *New Position of Purchasers of Lands belonging to Individuals.*

Year	Area belonging to peasants after their purchases of lands from individuals						
	less than 1.5 deciatines %	less than 3 deciatines %	less than 6 deciatines %	less than 9 deciatines %	less than 15 deciatines %	less than 25 deciatines %	more than 25 deciatines %
1909	2.1	6.4	18.0	18.9	25.3	13.2	25.1
1910	2.4	6.8	19.8	21.5	29.8	14.1	5.6
1911	1.6	5.4	19.2	21.4	28.1	16.9	7.4
1912	2.1	5.4	18.9	20.0	28.1	17.3	8.2
1913	1.8	5.2	19.8	21.2	31.0	19.8	1.2
1914	1.7	5.0	18.0	22.2	27.5	17.0	8.6
1915	1.4	5.3	22.4	18.6	25.2	17.4	9.7

§ II. POSITION OF MORTGAGE DEBTS AND THEIR AMORTIZATION.

The total mortgage debt on 1 January 1915 was 1,386,452,474 roubles and was secured by 408,000 mortgages. On 1 January 1916 it was 1,398,224,506 roubles, secured by 525,950 mortgages.

The sum of the amortization quotas to be received in 1915 was 67,934,219 roubles. To this 33,685,005 roubles for overdue quotas had to be added, and thus a total of 101,619,224 roubles was reached. However only 54,439,005 roubles were actually received, and on 1 January 1916 arrears reached the total of 46,525,365 roubles or 68.5 per cent. of the quotas falling due in the year.

During the year a moratorium was granted for the payment of the amortization quotas in the invaded provinces or the territories in which payment was considered impossible, namely in the provinces of Vilna, Kovno, Grodno, Lublin, Keltze, Petrokov, Suvalki, Cholm, Kalish, Plotsk, Varsovia, Lomja Rafom, Minsk, Kurland, Livonia, and parts of the provinces of Podolsk and Volhynia.

As necessity has arisen the bank has also granted facilities to its debtors in the rest of Russia, namely in 3,475 cases and for a sum of 590,035 roubles.

From 1910 to 1915 delays were granted as follows :

TABLE XXXII. — *Facilities granted for the Payment of Amortization Quotas falling due from 1910 to 1915.*

Year	Number	Sum for the payment of which a delay was granted
—	—	roubles
1910	190	25,883
1911	201	44,672
1912	571	94,168
1913	847	119,834
1914	2,875	470,172
1915	3,475	590,035

It follows from this table that in 1915 the number of cases in which facilities were granted surpassed by 20 per cent. the corresponding number in 1914 and was four times as great as the corresponding number in 1913. The consequences of the war brought about a sudden increase in the payments not made. Already before the war they were increasing but only very slowly.

We should note that the sum of 590,035 roubles does not represent the total overdue payments of amortization quotas. We should add to it six million roubles, due as arrears, but suffered by the bank to lapse to its debtors.

The complete extinction of mortgage loans which reached their term of repayment was very little accomplished in 1915. Hardly 69 loans, secured by mortgages on 2,396 deciatines and amounting to 86,216 roubles, were extinguished. From 1907, the first year in which mortgage loans became repayable, onwards, the movement towards the extinction and redemption of mortgages was as follows :

TABLE XXXIII. — *Position as regards the Extinction of Mortgage Debts from 1907 to 1915.*

Year	Number of loans becoming repayable	Area of mortgaged lands — deciatines	Total amount of loans — deciatines
1907	148	27,897	383,198
1908	—	—	—
1909	3	521	20,466
1910	19	1,857	35,956
1911	196	53,201	614,294
1912	52	2,591	120,810
1913	63	3,652	133,570
1914	64	5,101	149,048
1915	69	2,396	86,216

During the bank's third period 614 loans secured by 97,216 mortgaged deciatines and amounting to 1,543,558 roubles were extinguished.

During twenty years loans completely repaid in various ways freed 509,693 deciatines mortgaged for a total sum of 21,780,361 roubles. Repayment took place as follows in the different years:

TABLE XXXIV. — *Distribution of Repayments of Loans from 1896 to 1915.*

Year	Complete Extinction			Partial Extinction			Total		
	Number of properties	Area — deciatines	Sum repaid — roubles	By redemption of mortgage	Without redemption of mortgage		Area — deciatines	Sum paid — roubles	
				Number of properties	Area — deciatines	Sum repaid — roubles	Number of cases	Sum paid	
1896	81	15,990	151,300	272	—	180,627	—	—	15,990 331,927
1897	111	22,373	130,961	7	913	4,169	415	269,095	23,286 405,035
1898	171	36,072	304,366	15	486	17,134	457	307,532	36,286 629,032
1899	172	31,921	350,556	14	363	20,071	545	416,961	37,255 787,588
1900	132	11,518	234,230	26	494	31,934	573	465,420	32,415 706,342
1901	125	13,956	225,174	18	590	10,970	745	429,158	12,108 701,064
1902	139	29,432	267,308	32	691	24,307	630	483,187	14,647 720,770
1903	187	15,018	668,118	27	163	13,863	627	498,020	29,595 1,165,168
1904	155	13,321	332,082	42	2,595	95,192	673	525,516	17,583 925,294
1905	112	14,319	136,455	55	393	31,431	584	462,176	13,714 693,402
1906	106	8,668	197,015	28	501	30,689	461	406,033	14,880 689,880
1907	123	9,910	84,340	49	1,603	94,107	969	429,006	10,271 584,480
1908	138	11,410	148,099	71	3,574	76,266	485	643,962	13,484 653,371
1909	173	28,410	234,273	56	1,146	51,641	735	643,962	12,556 929,876
1910	342	36,959	653,857	39	2,740	78,257	1,738	992,352	31,206 1,724,460
1911	454	39,311	855,032	74	899	92,407	2,419	944,411	37,585 1,891,850
1912	754	47,122	1,161,738	123	376	115,334	2,360	1,076,028	40,187 2,353,100
1913	909	36,831	1,113,143	165	1,502	123,218	3,115	1,077,460	48,627 2,313,821
1914	725	36,831	908,172	106	567	56,897	2,674	876,446	37,398 1,841,512
1915	474	29,676	795,346	101	402	53,271	2,519	883,772	30,078 1,732,389

§ 12. RENEWALS.

In 1915 debts were renewed in 178 cases and there were granted in supplementary loans 172,857 roubles, distributed as follows :

TABLE XXXV. — *Distribution of Complementary Loans.*

Categories of borrowers	Number of cases	Area — deciatines	Principal debt — roubles	Renewed debt — roubles	Complementary debt — roubles	Total — roubles
proprietors	159	2,295	193,390	186,754	76,955	263,710
co-operative societies. . .	19	5,810	680,590	667,668	95,901	763,570
Total	178	8,105	873,908	854,422	172,857	1,027,280

In the period 1909-1915 the renewals of the complementary loans granted were as follows :

TABLE XXXVI. — *Renewal of Grants of Loans from 1909 to 1915.*

Year	Number of cases	Area — deciatines	Principal debt — roubles	Renewal — roubles	Complementary loan — roubles	Total — roubles
1909	35	12,336	1,036,980	982,599	142,799	1,125,390
1910	55	9,785	637,186	625,159	90,920	716,080
1911	379	27,408	2,413,370	2,321,716	348,443	2,670,160
1912	212	32,059	3,015,600	2,961,339	432,290	3,393,630
1913	416	38,007	2,362,519	2,272,733	483,686	2,756,420
1914	298	20,878	1,725,910	1,691,406	344,773	2,036,180
1915	178	8,105	873,980	854,422	172,857	1,027,280

Thus it appears that the number of renewals was quite negligible and could not influence the bank's transactions with peasants.

§ 13. — DEBTS AND RESOURCES OF THE BANK.

The amount of the bonds issued by the bank was on 1 January 1916 as follows :

394,397,500	roubles at 4 per cent.
439,491,350	" " 4 1/2 " "
497,830,500	" " 5 " "
4,300	" " 5 1/2 " "
3,989,394	" " 6 " "

We must add to this sum 178,047,604 roubles, being the bank's initial debt emanating from the agricultural banks. The total sum is therefore 1,513,760,548 roubles.

During the year the bank issued new bonds at 5 per cent. for a sum of 987,300 roubles and at 4 $\frac{1}{2}$ per cent. for a sum of 31,836,650 roubles. The initial debt emanating from the agricultural banks reached 4,449,405 roubles. In addition bonds were repaid for a sum of 16,901,586 roubles. 1,260,750 roubles were paid to extinguish debts, and debts were bought back for 420,000 roubles. The initial debt emanating from the agricultural bank was repaid to the extent of 925,300 roubles. On 1 January 1916 the sum of bonds was 1,533,468 roubles.

The bank's capital on 1 January 1915 was as follows, in respect of amount and kind: the bank's own capital — 10,200,064 roubles; the reserve capital 28,212,236 roubles; the capital of Emperor Nicholas II 3,859,700 roubles.

During the year the bank's own capital did not change; the reserve capital reached 32,529,096 roubles; and the capital of the Emperor Nicholas II was increased by 818,050 roubles, a sum representing sales of crown property. The total capital was therefore 4,671,750 roubles on 1 January 1916.

The closing of the financial year therefore provided the following figures:

Receipts	24,164,141 roubles	
Expenditure	19,847,281	"
which gave	4,316,860	" as a net profit.

This sum passed in its entirety to the reserve.

In concluding our examination of the bank's activity in its third period we should recognize that it was responsible for enabling land to pass without disorder into the ownership of the peasants, that in pursuing its aim of liquidating large property it was of real benefit to the peasants, but that it could not solve the whole agrarian problem. In this third period the bank's objective changed. It no longer sought to accomplish only the transference of lands but also worked for a great and methodical reform of the agricultural masses. It could not attain to really positive results because above economic questions there is the political question involved in the tendency to reduce the *mir* — that traditional form of peasant property — and this prevents certain reforms from being fully realized.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

EGYPT.

THE "CRÉDIT FONCIER ÉGYPTIEN" (*Egyptian Land Credit*) IN 1915-1916. — *La revue économique et financière* (The Economic and Financial Review), 38th year, No. 30, Paris, 28 July 1917.

The report on the year 1915-1916 presented by the administrative council of the *Crédit Foncier Égyptien* at the annual meeting held on the 7th of last February shows that in that year the signs of an improvement in the economic situation were accentuated and that this was principally due to the general rise in the prices of agricultural products.

The cotton harvest of the 1915 season was affected by the reduction of acreage. It produced only 4,775,000 cantars (1), although the average harvest of the last three years surpassed 7,000,000 cantars, but the average price rose to 19 $\frac{1}{4}$ talaris (2) so that the harvest brought in 21,790,000 Egyptian pounds (3). Sowing in 1916 was in no way restricted and the official estimates point to a harvest of 6,023,820 cantars. Complaints of attacks by worm have been general. But the giddy rise in the price of cotton, which passed in a few weeks from 5 to 10 Egyptian pounds, allowed excellent results to be attained with a mediocre harvest. The price of grain and sugar-cane also rose, so that trade got rid of its stocks, and old debts have begun to be lightened while the absence of new debts has led gradually to healthier conditions.

The happy influence of this state of affairs favourably affected the making of annual payments to the *Crédit Foncier Égyptien*, especially in the two last months of 1915-1916; and therefore more satisfactory receipts may be anticipated for 1916-1917.

On 31 October 1916 total arrears amounted to 2,966,842 Egyptian pounds, in addition to 121,416 Egyptian pounds from their amount at the end of 1914-1915. The amount falling due in the year was 2,652,210 Egyptian pounds. The report notes that this amount includes an amortization of more than 1,000,000 Egyptian pounds. Recoveries of the principal of the annuities amounted to 2,530,794 Egyptian pounds. Settlements in cash amounted to 2,418,940 Egyptian pounds, the highest figure reached for five years, while settlements by way of consolidation reached 110,909 Egyptian pounds, the lowest figure in the same period. The amount represent-

(1) 1 cantar = 99.043 lbs. (2) 1 talari = about 4s 11 $\frac{1}{4}$ d at par. (3) 1 Egyptian pound = abt. £ 1. 4s 8d at par.

ing forced sales, by the *Foncier Egyptien* or other creditors, of real estate mortgaged to the society was 778,228 Egyptian pounds, or more by 21 per cent. than the average for the last five years. The percentage of real estate awarded to the society was however 50 as against 81 in the previous year, and this indicates a certain recovery in the business in real estate.

The council intimates that from the beginning of the year the situation again became sufficiently normal to allow the society to resume making loans, but that the business in real estate has been pretty well limited to sales under legal necessity. The few voluntary sales have rarely necessitated an intervention in the form of new loans. The balance-sheet dated 31 October 1916 therefore shows total mortgage loans to be less by 1,543,322 Egyptian pounds than in the preceding year.

The following is a comparison of the two balance-sheets :

	31 October	
	1915 frances	1916 frances
ASSETS :		
Shareholders	100,000,000	100,000,000
<i>Mortgage Loans :</i>		
Long term	653,428,074	615,547,415
Short term	6,591,791	4,420,547
By sale of real estate	4,712,807	5,096,497
By opening credit	7,572,886	7,232,738
	672,305,558	632,297,197
Loans in realization	483,507	853,669
Contingent sale of real estate	11,537,482	15,242,331
Real estate acquired by expropriation	27,555,062	34,744,041
Agricultural stock and implements		120,656
Loans secured by pledges	2,567,352	2,551,352
Interest acquired but not due	40,964,510	40,495,606
<i>Annual payments due :</i>		
Previously to this year	26,451,275	33,677,818
During this year	47,312,212	43,233,202
Society's real estate	1,279,336	1,279,336
Bills and various securities	15,524,274	47,471,181
Accounts of banks and correspondents	20,660,783	20,128,584
Cash in hand	68,147	39,193
Various	2,722,009	2,464,678
Total . . . Frances	969,431,507	974,598,844

LIABILITIES:	31 October	
	1915 francs	1916 francs
Capital in shares	200,000,000	200,000,000
Bonds in circulation	635,323,366	631,473,073
Repayable bonds, interest and dividends payable	18,851,918	16,847,761
Provision for amortizing bonds	18,370,669	19,506,835
<i>Reserves :</i>		
Reserve as by by-laws	7,735,804	7,679,109
Extraordinary reserve	25,165,860	25,165,860
Provision for eventual reduction of premium on bonds	14,890,903	14,890,903
Thrifty account	6,250,014	6,472,176
Provision for amortization of domain	10,697,895	15,490,176
Provision for loss on annual payments in arrears	7,628,829	8,354,365
Deferred payments on mortgage loans	72,369,305	78,052,589
Anticipated annual payments	581,373	492,989
Interest owed but not due	447,090	1,058,776
Interest owed but not due	9,114,352	10,067,327
Various	4,694,953	5,886,456
Profits and losses	9,678,481	11,231,038
Total Francs	969,431,507	974,598,844

Mortgage loans have diminished by forty millions. During 1915-1916 the *Crédit Foncier Égyptien* made 150 loans amounting to 12,581,414 francs, bringing the total amount of loans made since the society was formed to 1,803,690,428 francs. Amortization of loans and anticipated and regular repayments reached the sum of 52,689,775 francs, which explains the difference we have noted. The other items in the balance-sheet call for no remark in addition to what has already been said.

GERMANY.

THE "LANDWIRTSCHAFTLICHER KREDITVEREIN" OF THE KINGDOM OF SAXONY IN 1916. — *Der deutsche Oekonomist*, 35th year, No. 1808, Berlin, 11 August 1917.

If, in the report of this "Agricultural Credit Union", the placing of its paper in 1916 be compared with the placing thereof in the previous year

a considerable development is observed. In 1915 the society placed bonds and letters of credit for 5,714,300 marks, in 1916 for 6,642,700 marks. Towards the end of the latter year these transactions were particularly numerous, and the bonds and letters of credit intended for sale were sometimes found to be exhausted. Those available on 31 December 1916 represented only 287,900 marks, as against 539,475 marks in 1915 and 907,175 marks in 1914. During 1916 the value of this paper in circulation increased by a round sum of a million marks, passing from 371,231,375 to 372,256,250 marks. This is due to the large new issues of bonds and letters of credit by the *Landwirtschaftliche Kreditverein*, which amounted during the year to more than five and a quarter millions. These bills are repayable when mature at their nominal value and generally bring considerable profits to their holders while current. Such of them as remain to be amortized are in great demand by the public, as is shown by the figures regarding the free commerce in bills. It has been possible thus to lend anew 7,855,405 marks. Repayments amounting to 1,960,032 marks being deducted, the sum of the loans constituting the society's credit was 439,564,904 marks at the end of 1915, and it rose before the end of 1916 to 445,460,278 marks. During 1916 the forced sale by auction of fourteen properties pledged to the *Landwirtschaftliche Kreditverein* was ordered and seven were actually sold. Two were put up for auction on the *Kreditverein's* demand in consequence of dues to be paid. The seven properties sold by auction have an area of 165.1530 hectares (1) corresponding to 4,631.36 taxable units. If the sums thus granted by the *Kreditverein* be compared, from the point of view of the mortgage, they are seen to be 35.79 of the legal costs and 52.64 per cent. of the amount obtained at the last auction. In 1916 as in 1915 the *Kreditverein* was obliged to acquire a property to cover the amount of its credit. The properties sold by an amicable agreement extend over 3,155.40 hectares and are burdened as forming 93,159 taxable units. Their value has been certainly determined by means of an estimate, in the case of eleven of them by taking 40 marks as the average for a unit liable to the land tax. Such value is 6,605,339 marks. The loans made by the *Kreditverein* amounted to 2,876,400 marks, a sum covered by mortgages for 3,133,216 marks. If the amount of the loans made by the *Kreditverein* be compared with the value of the properties, determined by the double method already indicated, from the point of view of mortgages, it is found to be 47.43 per cent. of such value.

Under dues the sum of 450,574 marks occurs in the balance-sheet. It comprises later recoveries, amounting however only to 4,499 marks and emanating largely from debtors under arms, and the dues falling due in the first quarter of 1917 which amounted to 446,075 marks. At the end of January 1917 the total sum of dues owed in 1916 was 19,447,067 marks. Out of the 19,207,031 marks of dues owed in 1915 only 54,226 marks or

(1) 1 hectare = 2.47 acres.

0.28 per cent. were in arrears at the end of January 1916, and this sum was reduced in the following year to 33,591 marks or 0.17 per cent. It may therefore be said that recoveries are made in good conditions. In 1916 net profits were represented by 505,793 marks as against 430,887 marks in the preceding year. Of this sum 30,000 marks were paid as in the previous year into the general reserve and 80,000 marks into other reserve funds, whereas in 1915 nothing was paid into reserves. As in 1915 there was in 1916 a payment of 50,000 marks to the fund for amortizing the properties and of a dividend of 4 per cent. on their capital shares to members. The remainder of the balance was carried over into the next year.

Part IV: Agricultural Economy in General

FRANCE.

THE TECHNICAL RE-EDUCATION IN ESTABLISHMENTS DEPEND- ING ON THE MINISTRY OF AGRICULTURE OF MEN MUTILATED IN THE WAR.

SOURCE:

CHANCRAIN (Inspector of Agriculture): Study having this title and published in *La main-d'œuvre agricole*, 14th year, No. 217, Paris, 10 and 25 July 1917.

Since the outbreak of the war the Ministry of Agriculture has been ceaselessly busy over the fate of wounded and mutilated men from the country. It is indeed too clear that, apart from every other consideration, their future is bound up with the agricultural prosperity of France. As early as the beginning of 1915 the ministry was pushing forward the organization of agricultural re-education in its schools. The matter has not been without difficulties. The schools best fitted for re-education of this kind were almost all being used as hospitals; and staffs were lacking since managers and teachers had been mobilized.

However at the end of 1915 the Ministry of Agriculture had eight schools of re-education; five others were ready to start work at the beginning of 1916; and on 31 December eighteen schools of technical re-education were active. In July 1917 twenty-one of them were in full swing and six more were to be opened in August.

The re-education did not at first yield the results expected for the recruiting of pupils was difficult. Many of the mutilated agriculturists — the small proprietors, leaseholders and *métayers* — had only one preoccupation: they wished to go home as soon as they were free. These men could not be made to understand the advantages of re-education.

There remained the agricultural labourers, and they indeed form almost exclusively the pupils of these special schools. They consent to come to them because they hope the teaching they receive will enable them to find situations as managers or foremen. Sometimes their hope to better themselves leads them further: they pass into trade and industry. Is it right thus to encourage a new exodus into the towns? This new danger must be eliminated or at least attenuated.

For this end it is first necessary that the recruiting of pupils for the schools of agricultural re-education should give better results. It should be considered whether it be not a mistake to wait for the discharge of a mutilated man before admitting him to a school of re-education, and whether — what is worse — this mistake do not tend to his own disadvantage.

The experience of these State schools as of the private schools has shown clearly and precisely at what time technical re-education should begin. It should not be left until a man's discharge, or the number of the re-educated may be infinitesimal and a failure may result. It should begin before discharge, while hospital treatment is still being received, and should accompany re-education in physical functions. Recruiting should take place among mutilated and wounded men who will be discharged. The methods of beginning re-education at the earlier and at the later stage have been tried, notably in the district school of Ondes near Auch (Gers); and there is no longer any doubt that the earlier start leads to excellent results from every point of view. Wounded men who are going to be discharged are delighted to be taught while they are undergoing treatment. Several of them have even confessed that they came to these schools with the settled purpose of settling later, when they were free, in a town, and that their taste for agriculture has been revived. Very often a discharged mutilated man does not come to the schools of re-education and leaves the land because he imagines that he will never be able for the varied work of fields but is good only for a simple and monotonous task in a factory, or even that he is no longer adapted to any physical labour. Mutilated men who have reached this point of doubting completely their strength or skill may be shown that it is possible for a man who voluntarily abstains from the use of one limb to execute the labour of agriculture.

At the end of a week the men have regained confidence, and a month later they are almost normal workers. Little by little they are convinced that they must not look upon themselves as the inferiors of hale men, of whom they become at least the equals in right of the knowledge they acquire at the school of re-education.

Moreover not only has experience shown that technical re-education should take place as soon as the condition of the wounded and mutilated men allows of it, but the doctors have further discovered that to secure rapid cures and success in the reteaching of muscular functions there are no better exercises than the infinite varieties of movements and attitudes to which agriculture gives rise.

The Health Service therefore gave back to the department of agriculture the national schools of Montpellier and Rennes, in order that sections for re-education might be installed in them side by side with medical centres. The Ministry of Agriculture completely fitted up the school at Grignon for the reception of more than sixty wounded men. This combination of re-education and hospital treatment is realized wherever possible. The excellent results which it already gives allow the hope that agricultural re-education will keep on the land almost all the wounded and mutilated countrymen who might think of leaving it.

§ I. WHAT TECHNICAL RE-EDUCATION SHOULD BE.

There are already examples of efficient technical re-education: the small hospital of Martillac has already supplied about 30,000 working days to local agriculture, to the great advantage of the district and of the wounded men whose cure has thus been invariably accelerated, facilitated and rendered less costly. The maximum amount of energy, which would otherwise be lost irrevocably to agriculture, is thus recuperated within the shortest possible time.

We must not however close our eyes to the fact that the men's injuries always entail a diminution of purely physical force, however small may be the loss. The endeavour is to compensate for this diminution by an intellectual gain, in that the wounded and mutilated men are enabled to derive in the future more from their labour, even in many cases to do better than before the war. To reach such a result practice and theory must be skilfully mingled in the process of re-education. If the value of a mutilated man is to be so increased that there will be as much demand for him as for an ordinary workman, it is absolutely indispensable that the wherefore and the how of agricultural operations be carefully explained to him. Experience has made it clear that a mutilated man cannot give himself up continuously to what is called general agriculture.

"A mutilated man", says M. Duchein, director of the district school of agriculture of Ondes near Toulouse, "is really in place only at the head of a farm or a yard, as a farmer, *métayer*, lessee, manager or foreman. As such he can, being one of several workers on a farm, choose work suited to his aptitudes. Most of the poor men among the mutilated, and it is only they who need to have work found for them, will certainly have, when they have been re-educated, the technical qualifications of managers or tenant farmers". The men here contemplated have encountered the thousand difficulties of practical agriculture and have the habit of observation, and therefore it will be possible to give them in a comparatively short time agricultural teaching enabling them to raise themselves. The work already accomplished in the schools allows this confidence to be felt. But obviously all cannot find situations as managers. They will be workmen who will be appreciated and sufficiently sought after by farmers, but the possibility that they will be only casually and occasionally employed must be avoided. Thought has already been given to this point. The Ministry of Agriculture wishes that all mutilated agricultural labourers who have been re-educated in the schools of agriculture may easily become owners or lessees of land. Holdings to be let and small rural holdings which can be acquired cheaply are numerous in France. All which those concerned need, in order to establish themselves on them, is a little money. Agricultural credit is prepared to lend them this money. This is a matter of much importance to the mutilated men and to the recruiting for the schools of re-education, and it gives direction to the teaching in these schools.

The service of agricultural credit which depends on the Ministry of Agriculture is active to-day in all the departments of France and renders valuable support to young agriculturists to whom it offers credit of two sorts — long and short or medium-term credit.

We should recall that the individual long-term credit, instituted by the law of 19 March 1910 (1), includes long-term loans afforded by the district funds for agricultural credit and intended to facilitate the acquisition, disposition, conversion and reconstitution of small farms. These loans may be of as much as 8,000 francs and are repayable within a maximum period of fifteen years by annual instalment computed at the average rate of interest at 2 per cent. They should be secured by a mortgage or a life insurance contract.

The short-term credit regulated by the law of 31 March 1899 includes advances on harvests and loans to agriculturists, at very profitable rates, of the funds they need to buy manures, seeds, ploughs and animals and pay the wages of agricultural labourers and rent.

These loans are granted in return for the deposit of negotiable bills, generally guaranteed by a deposit or a warrant. Their term varies, according to the transaction which they enable, from 3 months to a year. Thanks to the mutual funds of agricultural credit, small agriculturists can therefore obtain the money they need on terms equivalent to those which large proprietors enjoy.

Moreover the district funds of mutual agricultural credit have lately been authorized to afford a new form of credit, called medium-term credit. This is to say that, to enable the acquisition of live stock or agricultural material, they may grant loans for a maximum term of five years and of a maximum amount of 5,000 francs under certain special guarantees. These loans are granted at the same rates as short term loans.

In order to benefit by any one of these forms of credit an agriculturist must be a member of :

(1) an agricultural syndicate or an agricultural mutual insurance society of the district ;

(2) a local fund of mutual agricultural credit. One of these societies may be joined when application is made for the loan, a member's share being in such case deducted from the sum lent.

The road thus opened up to discharged agriculturists is plain. When they have passed through a centre of agricultural re-education they will have serious guarantees of their technical ability which will render much easier to them the access to funds of agricultural credit, the more so because government is now considering how discharged men wishing to devote themselves to agriculture may benefit by special conditions which will yet further facilitate their acquisition of small rural holdings.

(1) See our issues for December 1910 and April 1911, *Bulletin Mensuel des Institutions Économiques et Sociales*, 1st year, No. 3, December 1910, p. 276 and 2nd year, No. 4, p. 197.

§ 2. THE ORGANIZATION OF THE SCHOOLS.

On principle the Ministry of Agriculture has made all possible use of schools of agriculture existing before the war, and has formed in each of them, side by side with the provision for general instruction, several specializing divisions, in order that the mutilated men may specialize at the same time in several branches of agriculture affording interesting openings. At present the following twenty-one schools of re-education are at work :

1. National School of Agriculture of Grignon.
2. National School of Horticulture of Versailles.
3. National Dairy School of Mamirolle (Doubs).
4. National Dairy School of Poligny (Jura).
5. Dairy Trade School of Surgères (Charente-Inférieure).
6. National Basketmaking School of Fayl-Billot (Haute-Marne).
7. Shepherds' School of Rambouillet (Seine et-Oise).
8. Special School for Mechanics of Noisy-le-Grand (Seine-et-Oise).
9. District School of Agriculture of Ondes (Haute-Garonne).
10. Practical School of Agriculture and Dairy Work of Aurillac (Cantal).
11. Practical School of Agriculture of la Brosse, near Auxerre (Yonne).
12. Practical School of Agriculture of Pétré (Vendée).
13. Practical School of Agriculture of Tomblaine, near Nancy (Meurthe-et-Moselle).
14. Practical School of Agriculture of Grand-Jouan (Loire-Inférieure).
15. Practical School of Agriculture of Oisellerie (Charente).
16. Practical School of Agriculture of Ecully (Rhône).
17. Practical School of Cooperage and Distilling of Saintes (Charente-Inférieure).
18. Practical School of Aviculture of Gambais (Seine et-Oise).
19. Departmental School of Bourges.
20. Departmental School of Auch-Beaulieu (Gers).
21. School " La Maison du Soldat ", 97 rue Jenner, Paris.

On 1 April these schools had re-educated 830 mutilated or wounded men while 381 such men were then receiving re-education.

It is announced that the following schools will soon be at work :

1. National School of Agriculture of Montpellier.
2. National School of Agriculture of Rennes.
3. School of Agriculture of Contamine-sur-Arve (Haute-Savoie).
4. School of Agriculture of Bordeaux-Blanquefort.
5. School of Agriculture of Besançon.
6. Departmental School of Cellard (Loire).

There will thus come to be twenty-seven schools of technical re-education in agriculture.

§ 3. RESULTS OBTAINED.

We will now examine the present state of these schools, the results they have obtained, the observations made in them, and the reflections which the practice of technical education has suggested to the teachers in them.

National School of Agriculture at Grignon. — There is a division for the training of rural mechanics and another for training shepherds. Eighteen mechanics of tractors or drivers of machines have already been placed at the disposal of farmers. Recruiting for the shepherds' division is difficult. The school could not render any real services by re-education until the Service of Health installed in it a medical hospital and the wounded men who were receiving treatment could be re-educated. Seventy-eight mutilated or wounded men have been re-educated and fifty-six wounded or discharged men are now being re-educated. The school could easily accommodate 150 of the mutilated.

National School of Horticulture of Versailles. — The school cannot board pupils and this is a serious obstacle to recruiting. Only four mutilated men have been re-educated.

Dairy Schools of Mamirolle, Poligny, Surgères and Aurillac. — These schools have re-educated thirty-one mutilated men. Recruiting is difficult. The Poligny school can receive only slightly mutilated men for the work necessary to the manufacture of Gruyère cheese is heavy.

Most of the mutilated men re-educated in the Surgères school become inspectors or testers of milk and can earn from 120 to 150 francs a month. The pay of buttermakers and firemen begins at from 120 to 130 francs a month. The Central Association of the Co-operative Dairies of the Charentes and Poitou has facilitated the stay of the men at this school by allowing 45 francs a month at least to such of them as belong to the three departments of Charente-Inférieure, the Deux-Sèvres and the Vendée.

The Chantal is so far from the large medical centres and the hospitals that the Aurillac school yields no result.

National School of Basketmaking of Fayl-Billot. — The school, which depends at once on the Ministries of Agriculture and of Commerce, recruits normally. Sixty-two mutilated men have been re-educated in it, eight of them being blind. All have easily found situations on leaving. Their average earnings are from 5 to 6 francs a day; a few receive 7 francs a day, or 150 francs a month with board and lodging. It follows on the director's personal observations that re-education should begin immediately after a cure, before the time necessary for the formalities of discharge has elapsed. Apprenticing is comparatively easily accomplished, even in the case of the blind. It is important not to be afraid of spending much time at the outset, for once the principles of basketmaking have been learnt time will eventually be saved. Thus after eight or ten months of apprenticeship a blind man can manage to make one or two objects which have a market and allow him to earn his living. A blind man's work should not differ from that of a seeing man and therefore his wage should approximate to that of the latter.

As much as possible the school should seek to send the men back to their homes. In any case it should find situations for the re-educated men, insure that they have work by coming to an understanding with manufacturers, and even give them guiding after they have been re-educated.

Shepherd's School annexed to the National Shepherding Industry at Rambouillet and the Training of Shepherds in the Schools of Agriculture. — This school was formed in accordance with a resolution of 3 April 1916 and received its first pupils on the following 30th of August. A committee of benevolence, got together by M. G. Hanotaux, gives 100 francs a month for the maintenance of each mutilated man. Good shepherds are highly important: they would help to reconstruct the country's flocks, without which the problem of wool will be very difficult to solve, as indeed it was before the war. The Ministry of Agriculture has therefore annexed shepherds' schools to several schools of agriculture. At Rambouillet two shepherds have been re-educated and six are being re-educated. The school at Rambouillet is also concerned with agriculture in general, gardening, basket-making, and, exceptionally, the management of engines. A gardener, the driver of an engine and a basketmaker have been re-educated, and three basketmakers and one gardener are now being re-educated in the school.

School of Driver-mechanics at Noisy-le-Grand. — Before the war the development of mechanical cultivation, as a certain palliative to the unceasing diminution of rural labour, was already a preoccupation of the Administration of Agriculture. There had been competitions in mechanical cultivation and schemes for schools for rural mechanics had been prepared. The war has made the development of mechanical agriculture a yet more urgent matter: after the war every agriculturist should be in some sort a mechanic. The Ministry of Agriculture has therefore regarded as an imperative duty a contribution to the staff necessary to the working and upkeep of tractors and of agricultural machinery generally. It has been possible to recruit this staff among mutilated agriculturists, the more so because the wages of such employment are equal to those given in industry. The following are examples of wages earned: manager of a depot of tractors, 15 francs a day; assistant manager, 12 francs; chief mechanic, 13 to 15 francs; chief assistant mechanic, 8 to 10 francs; chief smith, 8 to 12 francs; chief assistant smith, 6 to 10 francs; driver of a tractor, 3.50 francs plus 1.50 francs a hectare (1) — since two hectares are ploughed in a day this amounts to 6.50 francs a day — together with board and lodging.

An enquiry into the service of mechanical agriculture revealed that it is possible to re-educate as drivers of tractors men who have lost one leg, men who have lost one arm if the shoulder and elbow joints remain good, and men who have a stiffened elbow joint with a more or less normal shoulder joint. Men with a mended shoulder joint will never be able to drive well and will not be able to put out the necessary strength to start a machine. Men who have lost a left arm and have a stiff left shoulder have difficulty

(1) 1 hectare = 2.47 acres.

in manipulating the left-hand levers, especially if these are at a little distance. A man with one sound leg can however manage the foot-levers.

We have already seen that a division for rural mechanics has been annexed to the Grignon school. The same is true of the schools at Montpellier, Rennes, Ondes, Tomblaine, Oisellerie, Auch-Beaulieu and Brosse.

The school at Noisy-le-Grand was founded on a farm of 180 hectares, which was together with a sum of 100,000 francs, placed at the disposal of the Ministry of Agriculture by a generous donor, Mme. Gomel-Pujos. The school has been at work since 17 February 1917 and has already received 137 pupils.

Ondes District School of Agriculture. — The division for re-education in this school was formed on 4 December 1915 and may be considered to be the finest example of what the collaboration of a school of agriculture and the Service of Health can produce. The division disposes of a hundred beds. From the time of its foundation it has been maintained in an almost complete state. The pupils are admitted in series, every four months. The practical teaching includes farm-work, gardening, smith's work and woodwork, forestry and basketmaking. The wounded men are divided into six groups, and these in turn, for two days at a time, work : (1) on the farm — in the stables and under cover ; (2) on the farm out of doors ; (3) in the garden ; (4) in the smithy ; (5) in the carpenter's shop ; (6) at basketmaking and in the hospital. Recruiting has always been ensured by the chief doctors of the centre of neurology of the 17th region, Drs. Cestan and Decomps. Only some ten invalids have been placed, and they became managers earning from 100 to 120 francs a month with allowances in kind. The difficulties are great both of recruiting the pupils and of giving them the teaching which should complete their physical re-education. Half the wounded are farmers and are obsessed by a wish to go back to their homes. The other half, agricultural labourers, can be a little more easily influenced by a hope of bettering themselves. Almost all of them are very little educated and at first they are all suspicious. But after a fortnight such as have been convinced of the advantages of re-education are finally won. Their efforts and the progress they make are soon surprising. In four months' time these invalids have acquired an important sum of technical knowledge. They have, in fact, sufficient knowledge to till the soil intelligently. But in order that the initial difficulties may be overcome the men must be approached patiently and every effort must be made to give them confidence first in the technical teaching and then in themselves. It is possible to do this. At first a mutilated man feels that it will be difficult for him to play an active part in life ; his future looks dark to him ; he thinks he is condemned to an existence of unhappiness. Gradually he discovers the forces latent in his brain, and his hopes are reborn and amplified. When he leaves the school he is longing to prove his worth, to begin his task courageously.

The school of Ondes has re-educated 253 discharged wounded or invalid men, and now contains 133 pupils.

The School of Grand-Jouan has re-educated thirty-two mutilated men. The general instruction includes the study of the most important points

of agriculture and horticulture. The school also trains basketmakers, shepherds and rural mechanics. According to the director, M. Montaux, recruiting for it is accomplished fairly easily by advertisements in the newspapers; and the freely given support of the local press has further made it possible to find situations for all those mutilated men whose re-education has been finished. The system even provides offers of employment for men whose re-education is still in course. The wages earned by the men whom the director has thus placed vary from 1200 to 2000 francs a year, and this is for this district a high rate. It is noteworthy that all these mutilated men have better situations than they had before the war. Most of them are gardeners, a few foremen on farms or managers.

The School of Cooperage and Distilling at Saintes has re-educated fourteen mutilated men and is now re-educating three.

The School of Agriculture at Gambais has received twelve mutilated men and now contains three such.

The Departmental School of Auch-Beaulieu has re-educated ninety-six mutilated or wounded men and is now re-educating forty-five. Here, as in the school at Ondes, the management of the Service of Health has been of great assistance both to recruiting and to working. The chief divisions which have been organized are those of general agriculture, gardening, poultry-keeping, cow-keeping, grafting and viticulture, woodwork and smith's work, the division for the mending of agricultural implements and that for the driving of tractors. It seems also to be useful to revive in the field-workers the elementary knowledge of writing, French and arithmetic which they received in the primary schools and have most frequently forgotten, in order that they may keep accounts connected with their work, if necessary the accounts of a property. The manner in which the pupils apply themselves to the elementary lessons they receive in the various branches of agriculture is the surest guarantee that these lessons are necessary. Manual work occupies them for nearly five hours a day and is the real basis of their re-education. The practical work is of two kinds: it aims at re-educating the physical functions of a mutilated man and at his readaptation to agriculture. He needs progressive exercises to give suppleness to his stiff limbs or to give him skill to use them or to use artificial limbs. A series of exercises have this aim. The readaptation of a man to agriculture is accomplished at Beaulieu in the school's annexes by the teaching of various special branches of agriculture chosen in accordance with his physical aptitudes or the knowledge he possesses.

The same difficulties have had to be overcome as in the other schools, and here again the help of the Service of Health has been useful, thanks to the very special interest which M. Prost Maréchal, director of the Service of Health in the 17th region, has taken in the school since the end of December 1916. This service filled thirty vacant places in the school, which is maintained as a fully active re-educational centre having from forty to fifty pupils. About a hundred wounded men must have passed through Beaulieu and three fourths of them have returned to agriculture.

The Departmental School of Bourges has re-educated nineteen mutilated or wounded men and is now re-educating twelve such.

The "Maison du Soldat" (Soldier's House) in the 13th *arrondissement* in Paris has re-educated sixty-four mutilated men and is now re-educating sixteen such.

§ 4. TEACHING METHODS IN THE SCHOOLS OF AGRICULTURAL RE-EDUCATION.

Most of the mutilated men who come to the schools of agricultural re-education have received only elementary primary instruction. To reach the best results as practically as possible the master gives intuitive teaching by means of object lessons. He always makes an appeal to the pupil's judgment and spontaneity; he proceeds from the known to the unknown, from the concrete to the abstract, from the easy to the difficult; he provokes thought in the pupil; he helps him with a series of easily answered questions; he places him on the right path, leaving him the pleasure and profit of individual initiative. A lesson is almost always a dialogue between the pupils and the teacher who interrupts his remarks as often as circumstances seem to him to make questions necessary. A lesson is merely an explanation of practice. All the teaching is practical; but no agricultural operation is accomplished unless the pupil have understood the why and the how thereof.

§ 5. MEASURES NECESSARY TO THE SUCCESS OF AGRICULTURAL RE-EDUCATION.

One point cannot be over-emphasized. The true way to succeed is to recruit, as soon as their condition permits, only mutilated and wounded men who will be discharged, and to conduct together the re-education in physical functions and in technique. For this it is necessary to connect the schools of agriculture with the medical centres. Investigations have shown that it is unwise to re-educate in one establishment discharged invalids and mutilated or wounded men who will be discharged but are still subject to military discipline.

A knowledge of the advantages of re-education should be disseminated, for the men concerned are always too suspicious of it until they have experienced its benefits. It is intended to do propaganda work by means of an organization which will be represented in all the hospitals and will be called the *League for the Return to the Land*. Lectures and cinematographic films will be very useful in teaching through hearing and sight how much is already being accomplished and how well the efforts for re-education have been founded. A special pamphlet has been prepared for the wounded in the

hospitals and this shows: (a) What agriculture will be after the war (conversion of manual into the less laborious mechanical labour — the agriculturist become a mechanic); (b) How industry compares with agriculture from the point of view of health; (c) What an educated agriculturist can earn and what agricultural mechanics are now earning; (d) How a wounded or mutilated man can receive free teaching; (e) How an agricultural labourer can easily become a landowner or a tenant farmer. It would be well also to set up beside each school of re-education and in constant connection with its director a special organization for the placing of re-educated mutilated agriculturists.

GREAT BRITAIN AND IRELAND.

THE CORN PRODUCTION ACT, 1917.

OFFICIAL SOURCE:

THE JOURNAL OF THE BOARD OF AGRICULTURE, Vol. XXIV. No. 6, London, September 1917.
MEMORANDUM EXPLAINING THE PRINCIPAL PROVISIONS OF THE CORN PRODUCTION ACT, 1917, AS REGARDS AGRICULTURAL WAGES IN ENGLAND AND WALES. — The Board of Agriculture and Fisheries, September 1917.

The Corn Production Act, passed on the 21st of last August, affects two great sections of the British agricultural population, the wage-earning labourers and the tenant farmers. To the former a minimum wage is secured; and the latter are in the first place guaranteed minimum prices for their wheat and oats for the six years from 1917 to 1922, and in the second place protected against a raising of their rents which might deflect to their landlords the profit arising from such minimum prices. The protection given by this Act to agriculture and its restriction of the freedom of agricultural contracts represent a principle new in British legislation.

We propose in this article to deal only with Parts II and III of the Act, which concern, respectively, minimum wages and the limitation of rents, and to leave on one side Part I which regulates the minimum prices of wheat and oats. We purpose further to deal only with the Act as it affects England and Wales, omitting the particular provisions for Scotland and Ireland.

§ I. THE FIXING OF AGRICULTURAL WAGES IN ENGLAND AND WALES.

a) *Agricultural Wages Board.* — The Act provides for the establishment, by the Board of Agriculture and Fisheries, of an Agricultural Wages Board for England and Wales, of which the main function will be to fix minimum rates of wages for workmen employed on agriculture. The term workmen includes women, boys and girls, and the term agriculture includes not only farm work but also work on osier land, and in woodlands, orchards, market gardens and nursery grounds.

The Wages Board will consist of three classes of persons, namely: a) "appointed members", otherwise persons directly appointed by the Board of Agriculture and Fisheries, who need not necessarily be engaged in agriculture but who will be expected to judge impartially between employers'

and workers' interests ; b) members representing employers ; c) members representing workers.

Women as well as men will be eligible as members of the Wages Board.

The members representing employers and those representing workers must be equal in number ; and the appointed members must not exceed a quarter of the total number of members of the Wages Board. For the rest, the numbers of appointed and of representative members and the methods of electing both classes of the latter will be determined by regulations of the Board of Agriculture and Fisheries.

The chairman and secretary of the Wages Board will be appointed by the Board of Agriculture and Fisheries.

b) *Minimum Rates of Wages.* — It will be the duty of the Wages Board to fix minimum rates of wages for time-work for all classes of workers, and it may, if it think it necessary or expedient, also fix minimum rates of wages for piece-work. These rates, whether for time-work or for piece work, may be fixed so as to apply universally to agricultural workers, or may be fixed differently for different districts, different classes of workers, or different kinds and conditions of employment.

In fixing them the Wages Board is required by the Act to secure, as far as is possible, that an able-bodied man receive such wages as, in its opinion, promote his efficiency and enable him to maintain himself and his family in accordance with a standard of comfort reasonably consonant with the nature of his occupation. Where time-work is concerned the Act lays down specifically that the minimum rates must secure for an able-bodied man wages equivalent, in the opinion of the Wages Board, to at least 25s. a week. The term "able-bodied man" does not apply to women, boys or girls, but only to any male workman who is not incapable, by reason of age, mental or other infirmity or physical injury, of performing the work of a normally efficient workman.

In computing the wages the value of such customary allowances as are not prohibited by law may be taken into account, in so far as the Wages Board may authorize and on a basis of value to be fixed by the Wages Board. Deductions from cash wages in respect of an allowance of intoxicating drink are however illegal under the Truck Acts.

Any minimum rates fixed under the Act will be without prejudice to the payment, under any agreement entered into or custom existing before the passing of the Act, of rates higher than the minimum rates.

c) *Procedure to Fix Minimum Rates.* — Before fixing any minimum rate of wages the Wages Board must give notice of the rate which it proposes to fix, and must consider any objections to it which may be lodged within one month. When a rate has been fixed notice thereof must be given by the Wages Board for the information of the employers and workers affected.

The Wages Board may, if it think expedient, cancel or vary, after due notice, any minimum rate fixed by it. It must reconsider any rate if directed to do so by the Board of Agriculture and Fisheries.

d) *Procedure to Enforce Minimum Rates.* — When a minimum rate of wages has been fixed any agreement for the payment of wages at less than

such rate is void. Payment of wages at less than such rate renders the employer liable to a fine of not more than £20 and also to a fine of not more than £1 for each day on which the offence is continued after conviction therefor, unless he prove that he did not know and could not with reasonable diligence have ascertained that he was paying less than the fixed minimum rate.

When the Wages Board is satisfied that a worker on time-work is affected by a mental or other infirmity or a physical injury, rendering him incapable of earning the minimum time-rate normally applicable in his case, it may grant him a permit of exemption. The employer is not liable to penalty for paying a worker having such a permit wages at less than the minimum rate, so long as he comply with any conditions prescribed by the Wages Board when the permit is granted.

Where legal proceedings are taken against an employer for paying wages at less than the minimum rate the court may, whether or not it convict him, require him to pay to the worker concerned any arrears of wages which it may hold to be due.

Any worker may complain, or may authorize another person to complain, to the Wages Board that he is being paid wages at less than the fixed minimum rate, and the Wages Board may, if it think fit, take steps on his behalf for the recovery of his due arrears of wages or the prosecution of his employer.

Moreover a worker may take proceedings on his own behalf for the recovery as a civil debt of any arrears of wages which may be due to him in respect of his payment at less than the minimum rate.

When a worker is working by the piece on work for which a minimum time-rate but not a minimum piece-rate has been fixed by the Wages Board, he may complain to this board, or may authorize another to do so, that he is receiving wages disproportionately low as compared with the wages payable at the fixed minimum time-rate. The Wages Board may then direct the employer to pay the difference between the effective amounts of wages at the two rates, and the worker may recover from the employer, summarily as a civil debt, any sum which the Wages Board so direct to be paid.

Officers may be appointed by the Board of Agriculture and Fisheries to investigate complaints and otherwise secure the proper observance of the provisions of the Act relating to minimum rates of wages. They will have the power to require the production of wages sheets and other relevant information. Persons refusing, at their demand, to produce such documents and information, or knowingly producing false documents and information, will be liable, on conviction, to a fine not exceeding £20, or to imprisonment for not more than three months with or without hard labour. The officers have power to take legal proceedings in pursuance of directions of the Board of Agriculture and Fisheries for the enforcement of the Act.

e) *District Wages Committee.* — The Wages Board may establish Wages Committees to act for such areas as they may determine. The Board of Agriculture and Fisheries may require them to do so.

There will be equal representation on a District Committee of local employers and local workers, and it will include also at least one member of the Wages Board or another nominee of the Board of Agriculture and Fisheries. Its composition will be further settled by regulations of the latter board.

It will be the duty of a District Wages Committee to recommend to the Wages Board minimum rates of wages applicable to its own district. Only the Wages Board itself can fix, vary or cancel minimum rates of wages; but no minimum rate fixed for any area for which a District Wages Committee has been established can have effect or can be varied or cancelled except at the recommendation of this committee, unless it has had an opportunity of reporting thereon to the Wages Board.

The Wages Board may refer any matter to a District Committee, which will report and make recommendations thereon, and may delegate to a District Committee any of its powers and duties except the power and duty to fix minimum rates of wages. It may also authorize a District Committee to delegate any such powers, including that to issue permits of exemption to workmen who are not able bodied, to a sub-committee.

f) *Expenses and Remuneration.* — Expenses incurred with the consent of the Board of Agriculture and Fisheries by members of the Wages Board or of a District Committee, and sums paid to them with such consent to compensate for loss of time, will be paid out of public funds.

g) *Provisions of the Act already in Force.* — Pending the establishment of the Wages Board and District Committees, an able-bodied man employed on time-work, but no worker of any other class, who since 21 August 1917 has received wages — including allowances — which are in the opinion of the court less than equivalent for an ordinary day's work to the rate of 25s. a week, is entitled to recover the difference between such rate and that at which he is being paid from his employer as a civil debt, at any time within three months after the minimum has been fixed. The value of allowances in the cases will, if disputed, be determined by the court.

§ 2. THE RESTRICTION ON THE RAISING OF AGRICULTURAL RENTS.

a) *The Scope of the Restriction.* — Part III of the Act prescribes that when, after 21 August 1917, a contract of tenancy is made or varied, the highest permissible rent is that which the landlord could have obtained if the provisions as to minimum prices of wheat and oats, contained in Part I of the Act, had not been in force.

The purpose of the restriction is thus to reserve to the farmer, to the exclusion of the landlord, the profit derived from the minimum prices.

This part of the Act is said to apply to "any parcel of land which is wholly agricultural or wholly pastoral, or in part agricultural and as to the residue pastoral, or in whole or in part cultivated as a market-garden, and which is not let to the tenant during his continuance in any office, appoint-

ment or employment held under the landlord". Since however the restriction on the raising of rents is governed by the provision as to the minimum prices of wheat and oats, in effect this part of the Act concerns only arable land and land which will become arable.

The Act does not make it illegal for a landlord to obtain the best rent he can for his land, provided the effect of the guaranteed prices is left out of account. It does not affect the existing law as to the determination of leases, whether at their expiry, by notice to quit, or otherwise.

(b) *The Method of Enforcing the Restriction.* — If a tenant have reason to think that the rent he is asked to pay is higher than it would have been if the minimum prices for wheat and oats had not been guaranteed, and if he cannot arrange that it be reduced to the sum which would have been its amount without such guarantee, he may require the matter to be referred to a single arbitrator under and in accordance with the second schedule of the Agricultural Holdings Act, 1908. He must however first serve on his landlord, either personally or by registered post, within one year of the time at which the old contract is varied or the new tenancy begins, a written notice requiring the rent to be referred to arbitration.

A tenant who has agreed to a new rent does not lose his right thus to refer it to arbitration.

While the arbitration or the preliminary proceedings are in course the tenant must pay the rent stipulated in the contract of tenancy, and may not withhold any part thereof as being in excess of the rent permitted by the Act. If however the arbitrator eventually determine that the stipulated rent is too great, the tenant may recover whatever he has paid, since the old contract was varied or the new tenancy began, in excess of the rent determined by the arbitrator to be legal. He may recover such amount by deducting it from the rent he afterwards pays or otherwise, and he will in future pay only the determined rent.

The costs of the arbitration and award and incidental thereto are in the discretion of the arbitrator, who may direct to and by whom and in what manner they or any part of them are paid. In awarding costs he must take into account the reasonableness or unreasonableness of the claim of either party, in respect of amount or otherwise.

The arbitrator is appointed by agreement between the disputing parties, or failing this by the Board of Agriculture and Fisheries.

Nothing in the Act prevents a landlord and tenant from agreeing to a rent subject to its reference to arbitration under the terms of the Act.

A tenant who gives up a holding, rather than agree to pay a rent demanded as a condition of the renewal of his tenancy, cannot appeal to arbitration under the Act; and has no right to resume occupation of the holding even if it be decided subsequently, in proceedings instituted by his successor, that the rent demanded was in excess of that allowed by the Act.

HUNGARY.

INTERIOR COLONIZATION AND THE FUTURE OF SMALL PROPERTY.

SOURCES :

CZETTLER (Dr. V. v. Jenö) DIE INNERE KOLONISATION IN UNGARN, in *Archiv für innere Kolonisation*, Parts 10 and 11, Berlin, July and August 1917.

GLOSSEN ZUM UNGARISCHEN KOLONISATIONSGESETZENTWURF, *ibid* :

The form and structure of rural property in Hungary are a consequence of the historical vicissitudes through which this country has passed in the last century and which have governed the formation of large landed property. In these must also be sought the origin of the small rural towns which are here so characteristic, towns of which 40 or 80 per cent. of the population are agricultural labourers, generally owners of a house and a small garden. These labourers form the mass of the peasants who emigrate temporarily, and are employed more or less throughout the country on all kinds of work. They are however much attached to their native soil to which they return as soon as the work for which they have been engaged has ended.

When, on the whole somewhat late, capitalism made its conquering entry into Hungary, some of the wandering labourers bought land and many of them became small proprietors. The redivision of lands, the division of common pasture-lands and other collective property, and above all the sale of properties of the Domain which, for financial reasons, took place between 1870 and 1880, had an important effect in this direction. But these events entailed an entire absence of regularity in the method of taking possession of lands. When the finances of the Hungarian State were reduced to order and the conditions of the market improved, the position of landowners also became better. Consequently a smaller extent of land came into the market every year, and the opportunities for the rural populace, living apart in small half-rural and half-urban groups, to buy land, diminished proportionately. It was then that the first agrarian social movements began.

In order to relieve these over-populated groups of their excess of labour and better to realize the value of large landed property, which hitherto had been insufficiently cultivated owing to the lack of labour and capital, the government decided on the very definite land policy of methodically promoting interior colonization on the basis of a division of large estates suited to this use.

In this way and on these principles the first colonization law was framed. It left colonization strictly limited for it regards only State enterprises

of colonization and even renders colonization by individuals almost impossible. This law placed six million crowns (1) at the disposal of the Ministry of Agriculture. The interest of this sum was to be used for affording loans and other financial help to agriculturists cultivating lands of the Domain. Clearly since available resources were so slight, colonization on a large scale could not be contemplated. Sixteen colonies which were formed comprise nearly 1600 positions for farmers and 200 more for agricultural labourers. The average area of each farm is 40 arpents (2) and the purchase price varied from 3,000 to 16,000 crowns. The maximum concession was three fourths of this value and the term of redemption fifty years, interest being at the rate of 4 per cent.

Such being the conditions, the whole country felt the effect of the inadequacy and lack of measures which could provide an impulse where so important a matter was concerned. Dáranyj, Minister of Agriculture and president of the Federation of Hungarian Agriculturists, took note of aspirations which existed and embodied them in two proposed laws, respectively dated in 1903 and 1909, as to colonization and the regularization of the parcelling of land. But neither of his schemes became law. That of 1909 was however most useful for it treats the whole problem of a land policy fundamentally and integrally. It deals not only with colonization by the State and individuals but also with the parcelling of land, with the *Rentengut* (2) or property subject to the payment of a yearly rent, with colonization based on leases and with farmers' co-operative associations. It contemplates a colonization fund of 120,000,000 crowns. It would have been applied, for special ends, on all State property without reservation. Had it become law when it was introduced it would have met with a great success, for the purchasing power of money was then far greater than it is now.

This scheme having fallen to the ground the State founded a federation of Hungarian institutions of land credit, the *Altruistenbank*, in order not completely to lose its directive influence over rural affairs. Although this institution disposes of somewhat limited resources they assure to the State an influence over the parcelling of land, the sales of property and the terms on which rural credit is afforded.

It is certain however that Hungarian rural policy has not brought about that the State or the middle class disposes of sufficient financial resources or capital to be able to cope with the problem of colonization on a large scale; and the parcelling of land by business men who consider only their own profit is almost always fatal to the economic future of the new small proprietors. Thus among those in favour of interior colonization the idea arose of seeking for new resources and opening up new roads to the desired goal. If this were impossible on the basis of property a positive result

(1) 1 crown = about 10 $\frac{1}{4}$ d. at par. (2) 1 arpent = 1.4213 acres.

(2) For the introduction of the *Rentengut* into the colonization of North Germany (provinces of West Prussia and Posen) see our issue for December 1912, *Bulletin des Institutions Économiques et Sociales*, 3rd year, no. 12, pp. 146-148.

might be reached by means of contracts for long leases. In this way a movement became apparent in Hungary, in consequence of the action of Count Alexander Karolyi and the Federation of Agriculturists, towards the formation of farmers' co-operative associations. To this movement belongs the foundation of independent farmers' co-operative associations, having more or less fixed by-laws, of registered co-operative associations, of mere societies, and of lesser groups of local co-operative credit associations belonging to the federation of the central fund of Hungarian co-operative credit associations, and of their special branches.

All this certainly shows progress towards the realization of the programme for the constitution of small farms, but the development has not yet taken a precise direction. Two of the most important corporations insisted, by means of collective manifestoes, on the necessity of interior colonization and of introducing without delay a law for its organization. It was the Federation of Hungarian Agriculturists and the Hungarian Representation of the Interests of Agriculturists of Transylvania who thus distinguished themselves.

Thus little by little the problem of interior colonization and of a rural policy became ripe for solution. All connected and contingent questions had been examined, studied and analyzed. The comparative value of the various systems of colonization had been analysed: that is to say that the question of whether colonization based on freehold or leasehold tenure were the more profitable had been investigated.

The projected Dáranyj law of 1909 was rid of certain provisions which had come to be out of date. The scheme remained legally the most complete, where its matter was concerned, and could form a point of departure for the new colonizing activity, both theoretical and practical.

In Hungary the development and success of interior colonization are facilitated by factors which have an evident importance. Above all no one can say that there is not land to be colonized. In a country where the lands which, by selling and purchasing contracts, change hands every year, reach an area of two million arpents, there is no difficulty in finding land to buy. We should add that in Hungary large estates will lack capital after the war, and owing to the lack of labour a part of their lands will have to be sacrificed to allow the organization of the remaining part with the money obtained by the sales.

The agency for colonization must be founded on the principle of decentralization. In Hungary there should be such agencies in every comitat, on the model of the provincial rural societies of Prussia (*Landgesellschaften*). The foundation of an institution of central credit will be necessary only for the financial side of the enterprise.

These principles ruled in Hungary in the matter of interior colonization until the outbreak of war. Other factors have since complicated the problem, which is, in spite of all that has been accomplished, still far from being solved in practice.

We will now examine the present attitude of public opinion and of competent influences in Hungary with regard to the problem.

* * *

The gaps caused by the war in the population, especially in the rural population which has been more severely tried than other classes, have made the problem of colonization by ex-soldiers one of the moment. Small property is the best means of increasing the population, and soldiers fallen in the war can be best and soonest replaced by the rural population. The problem is seen to be yet more important when the value of agricultural production, and especially corn growing, in Hungary is considered.

The bishop of Stuhlweissenburg, Ottokar Prokászka, has made himself the promoter of this kind of interior colonization. At the general meeting of the Federation of Hungarian Agriculturists, which has always given special attention to interior colonization, he proposed the division into small active and independent farms, which could be granted on lease first to the invalids of the war and the widows of fallen soldiers and then to all citizens who had fought at the front, of all ecclesiastical and communal property and property subject to other services, that is a total areas of 10,000 arpents at present not adequately farmed.

His proposal was very favourably received and the problem was considered from different points of view. The Federation of Hungarian Agriculturists, as the corporation most interested, nominated two councils for the study of problems of rural policy. The reporter of the council responsible for rural policy, Dionis von Sebest, drew up two schemes for a law. The first of them is on the agrarian right of succession and tends to introduce the option of naming a single heir instead of the system of dividing real estate, on the model of the German *Anerbenrecht* (1) or right to leave undivided property to one heir. The second scheme treats of a lease for fifty years which would aim at transforming rural leases, converting the right they confer from an obligation to a property right. Yet another scheme, connected with these two, concerns the granting of credit on the security of rural implements, and would introduce into Hungarian law the system of chattel mortgages. A fourth scheme is for the distribution of lands, and aims at avoiding the abuses and speculation, now so common, which accompany the parcelling of land, by introducing a legislative measure entailing State superintendence and grants.

The council for rural policy collected data at the same time as to the largest estates on which colonization could be undertaken.

We will not report here the various attitudes of political parties and of the men most representative of Hungarian agrarian policy with reference to these proposals, and the action taken to give them the practical force which would allow of their realization. We will only state that Count Tisza in the Chamber of Magnates declared himself convinced of the usefulness of moderate interior colonization in the kingdom. He made clear

(1) For this institution, which is now applied to interior colonization in North Germany, see our issue for December 1912, *Bulletin des Institutions Économiques et Sociales*, 3rd year, no. 12, pp. 147-148.

the importance and justification of large landed property organized on modern lines, which he considered to be necessary to the victualling of the urban populations and to provide a model of farming technique. But small property is a matter of urgent interest to the increase of the population, for small properties supply the labour of which there will be a double need after the war. In deference to this principle Count Tisza affirmed that the government intended, and legislation contemplated, stimulating an increase of small farms where conditions of the soil allowed of them, and especially where there were many large properties insufficiently farmed.

It should be remembered that in Hungary the importance and future of interior colonization depend less on the soil than on capital. Land exists in abundance. The greatest difficulty is to find mortgagees, and to obtain personal credit and credit for the conduct of the farm.

A very recent development of the problem we are considering was the introduction into parliament of two proposals when the projected law as to war taxes was being discussed. Latterly in Hungary many stock companies, and societies of capitalists who are generally foreign providers, have bought several million hectares (1) of land, being influenced by the promise in the projected law of certain facilities with regard to the taxation of their capitalized property. Count Maurice Esterhazy therefore proposed to the government to bring the projected law as to colonization before parliament before the tax on such property was imposed.

To complete these measures Marquis George Pallavicini proposed that two ordinances should be adopted, which would rule that the State should have a right of pre-emption whenever there was a sale of land, and that the right to buy lands should be limited, when foreigners or corporations using foreign money were concerned. The cases of allowing lands to pass to the peasants and allowing them to pass to speculating capitalists are indeed very different.

The two proposals were rejected by parliament, but they are none the less a clear sign of a will to reach in the problem of interior colonization a concrete solution which will take into account the needs to which the war has given rise.

(1) 1 hectare = 2.47 acres.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

CANADA.

DISCHARGED SOLDIERS AND AGRICULTURE. — *Canadian Finance*, Vol. VIII, No. 13, 4 July 1917.

A census is now being taken of Canadian soldiers overseas, and on this it should be possible to base an estimate of those inclined to agriculture. The card issued for the purpose of the National Service Commission includes spaces to be filled up with a man's name, age, unit and rank, postal address before enlistment, and province; and also asks a number of questions, among which are the following: "Is your old position open for you on your return to Canada in fit condition? Do you propose to make your home in Canada after the war? Do you wish to take up farming as an occupation? Have you ever worked on a farm? If so, how long? How much money do you expect to have at your disposal on your return to Canada? Do you desire to take advantage of any available scheme of assisted agricultural settlement? Would you, if necessary to gain experience, work for prevailing wages on a farm after your return, providing your dependents were in the meanwhile given the same support as they now receive?"

To provide for the returned soldiers desiring an agricultural training the government of *Alberta* has arranged to keep one of the provincial schools of agriculture open throughout the year. Ordinarily these schools are closed from 1 April to 1 November. The school chosen is at Olds, fifty-eight miles north of Calgary and on the Edmonton line. The men will receive in it twelve months' instruction, and may choose whether they will do so continuously for a summer and a winter, or in two winter courses separated by an interval which they can spend on a farm.

In *Saskatchewan* the commission has arranged for the returned men to be trained at the agricultural college of the provincial university at Saskatoon, where shorter and more intensive courses of instruction than those provided for ordinary students have been planned for them.

In *Manitoba* the Military Hospitals Commission has taken over the old agricultural college at Winnipeg, and soldiers will be able there to obtain instruction and practice in many branches of work on the land. Poultry raising on a large scale will probably be taken up at this college with the co-operation of the Produce Association of Canada. A deputation of the latter body has visited the commission at Ottawa and pointed out that there are considerable opportunities for partly disabled men in the business of marketing the produce of poultry farming, as in testing and grading eggs

and grading and packing poultry. The old college at Winnipeg is equipped with greenhouses for winter gardening. It has also a machinery hall, one hundred feet square, where men will be taught to use and repair farm machinery of all kinds. Men able to do this are in great demand, especially in the west where tractor farming has been developed on the largest scale. The Winnipeg representative of big implement houses are co-operating in the work of instruction by lending without charge tractors, threshing machines, gasoline engines and other modern agricultural appliances.

The great re-education centre for *Ontario* at Guelph, which has just been taken over by the Military Hospitals Commission from the provincial government, is fully equipped for the most thorough agricultural training. The property covers 850 acres, nearly all available for this purpose and largely already under cultivation. There are on it a large greenhouse for gardening under glass, a model dairy barn and up-to-date machinery; and live stock of all kinds complete the equipment for stock farming.

FRANCE.

1. THE CANCELLING OF RURAL LEASES.

A law of 17 August 1917 sanctions the cancelling, without payment of indemnity, of rural leases, in the interest of lessees or their heirs placed in certain circumstances. By Article 2 of this law when the lessee of a rural holding is killed by the enemy, or dies of his wounds or of an illness contracted or aggravated while he is serving, his heirs may demand, by registered post within three months of the promulgation of the law, of his death or of the official intimation thereof, that his lease be cancelled. The same privilege exists in the case of: 1) a lessee who has been discharged because of wounds received or an illness contracted or aggravated while he was serving, and who is not in a condition to continue to cultivate the leased real estate; 2) a lessee whose wounds or illness are consequent on the war although he has not been with the colours; 3) the widow or heirs of a lessee in the latter case. In all these cases a full right to free cancellation will exist, and the cancellation will have effect at the end of a customary term, delays for leave which may not exceed a year being observed. Cancellation can be given at the demand of the wife or children, or failing them of the parents or grandparents of a lessee called to the colours and officially stated to be missing or killed. Further, for six months after the cessation of hostilities and the return of the lessee to his home the latter may ask to have his lease cancelled, being responsible for proving, if the point be disputed, that he can no longer cultivate the real estate let to him, owing to wounds or an illness he has contracted while with the colours, or to circumstances of the war which have affected him although he has not been in the army. He will not need to pay any indemnity. Finally every lessee of a rural holding may, even if he be not mobilized and be outside the cases contemplated by common law and the new law, obtain a remittment or reduction of rents and

various payments falling due during the war and in the year after the war, if he have through the war suffered losses which have lessened the total value of his farm. All these provisions apply whatever be the form of a contract — lease for rent or for half or other share of profits —, and even to leases of fishing and shooting rights and to every concession to individuals, or fishing or sporting societies, in rivers, streams, canals, etc.

2. THE DEPARTMENT OF AGRICULTURAL LABOUR AT THE MINISTRY OF AGRICULTURE. — Announcements made by M. Henry Girard, chief assistant of this department, at the annual general meeting of the *Société d'Economie Sociale*, reproduced in *La Réforme Sociale*, 1 to 15 September 1917, pp. 192 to 196.

By a decree of 3 January 1917 the then Minister of Agriculture, M. Clémentel, formed a department for the supply and supervision of agricultural labour. His accomplishment was continued and developed by M. Fernand David. We will outline the organization of the new department, its activity and the principles on which it rests.

1. *The Organization of the Department.* — The organization tends to a decentralization of labour, which aims at hastening the progress of business and allowing it to be transacted locally, where it is understood and can be given its rightful importance. There is a central organization with agencies in the departments.

The central organization has three sections.

The first of these has charge of relations with the military authority from whom it must obtain, individually or collectively, that assistance of mobilized men and even of prisoners of war which is indispensable to the works of agriculture and to subsidiary industries.

In view of the impossibility of restoring to agriculture all the labour which it lacks it has been necessary to form a second section which has the duty of collecting from every possible place available labour, whether that of the unemployed, of refugees, of the physically unfit or of aliens.

Finally a third section detaches and distributes the oldest soldiers whose employment on agriculture is allowed by the Ministry of War. This section also sets on foot the investigations which become necessary when such a detachment is made on insufficient pretexts.

The head of the department co-ordinates the three sections. Side by side with him a department for technical research connected with agricultural labour is at work; and a bi-monthly bulletin, *La Main-d'œuvre agricole*, is issued. Five thousand copies of each issue of this journal appear, and they are sent to all who ought to have general ideas as to the labour supply and know the resolutions and publications relative to it. The central organization and the agencies in the departments are thus permanently connected.

The latter are the commissions of agricultural labour. Each has the *préfet* as chairman and consists otherwise of the director of the agricultural

Services, the representative in the department of the military authority and three well known farmers, and also of a member of the General Council wherever a question relative to the prisoners of war is on the agenda of a meeting.

The central organization is connected with the other administrations for the obtaining of labour, which it distributes among the departments of France. The departmental commissions make the subsequent detailed distributions, deal with all local questions as to the labour supply, and correspond with the central organization whenever they cannot solve their problems on the spot.

The deflection of the oldest soldiers to agriculture has hitherto brought 100,000 men back to the land, and will doubtless bring others. A certain number of agricultural artisans obtain temporary exemption from military service, and soldier agriculturists receive special leave. Thus agriculture has the benefit of a considerable number of working days which ought to be a source of general profit. To make sure of this extra labour supervision has been instituted.

This supervision is as simple as possible, first because the claims of agriculture are always moderate, and secondly because a tiller of the soil naturally and without a perpetual spur works with incomparable industry. A general supervisor of agricultural labour perpetually travels about France in order to get into touch with the officials, who are with the fewest possible exceptions themselves cultivators, and of whom one in each department superintends the military agricultural labour. These officials are attached to the departmental commissions of agricultural labour, and the circuits they make bring them into relation with an inspector in each canton, who is, whenever possible, a well disposed farmer.

2. *The Activity of the Department.* — Without entering into details it may be said that the activity of the department has three essential forms :

a) General measures for allowing the continuance of agriculture are initiated ;

b) The department intervenes in particular cases ;

c) Agricultural labour is organized for the future.

The general measures are based on the need of labour revealed by investigations and by the wishes which the departmental authorities express. Information is given in advance to the Ministry of War as to the time, the duration and the importance of given works, in order to allow appropriate steps to be taken at the right moment. Specific requests are made as to definite categories of mobilized men, whether distillers, sugar-refiners, sericulturists, shepherds, threshing contractors, etc., or artisans necessary to rural life, blacksmiths, smiths who mend agricultural implements, cartwrights or harness-makers. The department is there to provide for the future. In agreement with the Ministry of the Interior it organizes offices of immigration on the frontiers.

Unfortunately, in spite of its proposals and the general directions of the ministers concerned, a certain number of agriculturists derive no benefit from the steps taken in their favour. In their case the department in-

tervenes directly, calling the attention of the military authority to particular cases and seeking to give information as to agricultural needs.

Finally the department is preparing, from the point of view of agricultural labour, for the period after the war, adducing a mass of documentary evidence. It aims at maintaining agricultural production and seeking to increase it with the smallest possible amount of human labour power. For this end it must study the agricultural districts, estimate the importance of their various crops, see if these are produced in the most favourable conditions, and, if not, discover how to transform them. It must investigate the possibility of ensuring necessary labour to farmers by causing a return to the land, and do this by rendering country life attractive, organizing immigration, and greatly improving agricultural material. The department is at the fountain-head of information. It has already collected very interesting information, is actively following up its work, and expects to attain to fruitful results.

3. *The Principles on which the Department Works.* — The department of agricultural labour considers that the problem of the necessary labour is technical, and that it must be solved not by following general formulæ but practically, on the experimental method, taking into account economic facts and conditions.

It considers that no gulf must be fixed between the agricultural labourer, the employee and the master, but that all concerned must be recalled to their duty.

Doubtless after the war the department will not survive in its present form, but will continue as a national office of agricultural labour which will co-operate with the State and the large trade groups. Thus, at a time when the need for it will be acutely felt, it will be able to continue its work. It will be in correspondence with offices of agricultural labour in the departments of which the existing commissions are the germ. It will possess powers, independence and means of action.

NOTICES RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

ANNUAIRE INTERNATIONAL, DE L'ÉGISLATION AGRICOLE (*International Yearbook of Agricultural Legislation*), published by the International Institute of Agriculture, 6th year, 1915, Rome, Printing Press of the International Institute of Agriculture, 1917.

The sixth volume of the International Yearbook of Agricultural Legislation has lately appeared. It gives a sufficiently detailed picture, as complete as possible, of the laws and decrees of interest to agriculture which have been promulgated in 1916. The importance and interest of this publication at the present moment are evident. The new conditions arising out of the war have rendered necessary in nearly every department of social life legislative provisions which deeply affect the previous organization. The increasing difficulty of provisioning, the lessening of oversea trade communications, the insufficient production following on the lack of labour and the mobilization of millions of persons taken from their habitual occupations — all these things have given to agricultural legislation, not only in belligerent but also in certain neutral countries, a quite first-rate importance.

The new state of affairs which the war has caused in most States is reflected in nearly every part of the yearbook. Thus the first part (statistics) includes the measures which aim at making stocks consistent with the area to be brought under cultivation; the second part (trade) the rules as to provisioning and consumption; the third part (financial) the measures which give relief from or suppress certain taxes and contributions; the fourth part (vegetable production) the copious legislation aimed at encouraging the employment of uncultivated or abandoned lands, that is at stimulating farmers to increase agricultural production; the fifth part (animal production) the measures aimed at increasing stock breeding and decreasing the consumption of animal foodstuffs; the sixth part (organization) the formation of new agencies or modification of those in existence to meet, as effectively and rapidly as possible, the special needs of the moment. The eighth part shows the varied provision for thrift, insurance and credit, and the ninth the measures affecting rural property: all these aim chiefly at supplying credit to farmers, repairing damage due to the war, and granting lots of land to discharged soldiers. The tenth part contains the measures passed by parliaments and governments for the prorogation of the validity of agricultural contracts, or the temporary modification of the provisions governing them, in view of the particular conditions in which the present state of affairs has placed most agricultural families. There are also

the seventh part, which concerns diseases of plants and field pests, and the eleventh part which concerns rural hygiene and the control of agriculture.

The second, fourth and fifth parts are, as we have shown, of capital interest to any wishing to follow in all its details the legislative movement which the European crisis has provoked in the matter of the food supply. These parts of the yearbook group everything concerned with the trade in grain and provisioning in general, and the trade in other vegetable foodstuffs, seeds, manures, oleaginous fruits, textile plants, tobacco, live stock and animal products and agricultural machinery; the facilities granted for importation and the restrictions placed on exportation; the measures providing against and combating the rise of prices, unfair competition and commercial frauds; the measures regulating, from a legal point of view, commercial contracts; those intended to prevent the anticipatory sale of harvests; the transport of vegetable and animal products; the regulation of the industries of vegetable products and chemical manures; and finally the regulation of crops in wartime.

This last chapter contains, for instance, a notable German decree of 4 April 1916 which makes the provisions of a decree of 9 September 1915 as to compulsory cultivation applicable to urban lands capable of being cultivated. Another German decree, dated 13 April 1916, obliges owners of forests and other lands not agriculturally employed to allow such woods and lands to be used as pasturage. The French decree of 6 October 1916, as to the obligation to bring abandoned lands under cultivation, is also reproduced; as are the Italian decrees of 19 October and 14 December 1916, which respectively encourage increased corn growing, and by means of itinerant chairs of agriculture organize propaganda in favour thereof. There is also the text of the Russian decree of 16-29 March 1909, which was again put in force last year, as to the repayment of State loans to farmers for ensuring the provisioning of the country.

Numerous provisions included in the yearbook concern agricultural co-operation, insurance and credit. We will mention a law of the Philippines as to the formation and working of agricultural co-operative societies, a decree of the Regency of Tunis as to associations of owners of olive plantations, a law of Alberta (Canada) as to women's agricultural associations or farmwives' clubs, a Japanese decree as to the foundation and activity of co-operative societies, and a Portuguese decree regulating stock-farming syndicates. As to insurance, there are the Austrian ordinance of 11 September 1916 which modifies the compulsory provisions of the decree of 22 November 1915 as to the insurance contracts made by small mutual insurance societies or associations for the mutual insurance of live stock; the Danish law of 6 July 1916 which applies the principle of compulsory insurance to the accidents of labour, including the labour of agriculture, forestry, horticulture, stock farming and trade in live stock, the dairy industry, peat lifting, the threshing of grain, and milling; the French law of 25 November 1916 as to the insurance of men injured in the war who are employed in industry; and the Swedish law of 17 June 1916 which makes insurance against the accidents of labour compulsory. Finally as regards credit, there are a

Chinese decree of 8 October 1915 as to agricultural and industrial banks ; a decree of Costa Rica of 6 June 1916 setting up a mortgage department in the international bank ; the federal law of the United States as to agricultural credit ; and the measures passed in Italy to encourage agriculture in the southern provinces.

The chief of these provisions have already been noticed or analysed in this review, to the readers of which the yearbook is indispensable.

The part of the yearbook given up to rural property comprises the strictly legal provisions which define and regulate rights of property, of usufruct and of security in real estate, prescribe what formalities must be observed when these rights are transferred and when their holders are to be determined, especially in the interest of third-parties ; and which establish the procedure to be followed when an execution is to have effect on real estate or chattels. The same part includes provisions of a more specially social or political character, tending to influence directly the distribution of real estate and allow a fuller employment thereof. The following brief enumeration will give an idea of the fulness and usefulness of this part of the yearbook, which could alone justify the publication of the whole. The chapter on the methods of acquiring and transferring rural property gives the text of an Austrian decree which limits for the period of the war the free right to sell agricultural or forest land. The second chapter, on the formation and preservation of small rural property, contains a Danish law authorizing the State to grant loans to co-operative societies which aim at procuring small properties for their members ; and federal laws of the United States regulating the concession of homesteads in Alaska and the formation of stock-farming homesteads. The third chapter, on usufruct charges and security rights burdening rural properties, gives the text of a German decree specially providing for the exercise of rights depending on mortgages or rents, and of an Italian law as to emancipation from rights of common. The fourth chapter, on cadasters and land registers, contains a decree instituting an office for the preservation of landed property in each of the colonies of the group of French Equatorial Africa ; the unified text of the laws of New Zealand on the conveyance of land, based on the Torrens system ; and a Mexican law as to the formation of a cadaster. The fifth chapter is given up to interior colonization and shows strongly the influence of present circumstances. Thus it brings together a Bavarian law encouraging colonization by discharged soldiers ; and a British law and laws of South Australia, New South Wales and British Columbia having the same object. A Danish law, which occurs in chapter VI., aims at regulating lawsuits affecting real estate. The seventh chapter groups miscellaneous measures which concern property, among them a law of the German Empire as to the repair of war damages suffered by owners of real estate or chattels ; a Prussian decree regulating the redistribution in parcels of certain landed properties in the zones of East Prussia ravaged by the war ; that part of the Austrian ordinance, as to the third " novel " modifying the civil code, which is of interest to real estate, as well as certain provisions as to selling and letting contracts ; those parts of the new Brazilian code which concern agriculture ;

a Chinese law on the expropriation of lands ; a British law as to the management of lands occupied by the State for the needs of national defence ; and a Swedish law limiting the right of foreigners to acquire real estate.

Where the less important provisions are concerned the yearbook gives only their original title and its translation into French; of the others it gives either the whole text or extracts therefrom. In order that the reader may apprehend the entire content of the book, which is of 1250 pages, it begins with an analytical translation of L,XXXVII. pages, published in five languages — French, English, German, Italian and Spanish, and in order that it may be easily consulted it ends with a chronological table, arranged by countries, and an alphabetical table of contents

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXXIII.
8TH. YEAR: NUMBER 11
NOVEMBER, 1917.



ROME
PRINTING OFFICE OF THE INSTITUTE
1917

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Part I: Co-operation and Association

JAPAN.

THE PRESENT POSITION OF CO-OPERATION IN JAPAN.

OFFICIAL SOURCE :

ZANKOKU SANGYÔ-KUMIAI GAIKYÔ (*The General Position of Co-operation in Japan*). Ministry of Agriculture and Commerce, Department of Agriculture, Tokyo, May 1916.

In the *Bulletin des Institutions Économiques et Sociales* issued on 30 September 1910 we published a detailed statistical report of Japanese co-operative societies. It was based on the report published by the Japanese Ministry of Agriculture and Commerce in November 1909; and therefore it could not show the beneficent effects of the new law on co-operative societies, which the Diet of the Empire approved on 8 April 1909 but which had force only from 1 January in the ensuing year.

Subsequently on 20 January and 10 September 1912 the Ministry of Agriculture and Commerce published two new statistical reports; and therefore in our issue for January 1913 we published data which brought us up to 30 June 1912. The following tables reproduce data published in Japanese in May 1916 by the Ministry of Agriculture and Commerce; and, with the exceptions indicated in the annexed notes, they show the position of co-operation on 31 December 1915.

TABLE II. — *Increase in Number of Members (1).*

Year	Number of associations	Total number of members	Average number of members in an association	Number of members classified by occupation				Percentage of the members according to the classification adopted			
				Agriculture	Industry	Commerce	Various	Agriculture	Industry	Commerce	Various
1903	870	68,730	79	55,266	3,237	6,564	3,663	80.4	4.7	9.6	5.3
1904	1,232	93,632	76	75,289	4,410	8,942	4,991	80.4	4.7	9.6	5.3
1905	1,671	137,022	82	113,139	6,467	11,729	5,687	82.6	4.7	8.6	4.1
1906	2,470	224,770	91	188,020	7,530	15,352	13,868	83.7	3.3	6.8	6.2
1907	3,363	312,759	93	250,708	14,543	21,705	25,803	80.2	4.6	6.9	8.3
1908	4,391	493,010	110	398,352	23,418	32,391	38,849	80.8	4.7	6.6	7.9
1909	5,690	631,590	111	519,609	29,369	40,232	42,380	82.4	4.6	6.4	6.7
1910	7,308	789,264	108	646,407	31,570	50,513	60,774	81.9	4.0	6.4	7.7
1911	8,663	944,267	109	780,909	37,015	62,605	63,738	82.7	3.9	6.6	6.8
1912	9,683	1,074,813	111	880,272	42,993	73,087	78,461	81.9	4.0	6.8	7.3
1913	10,455	1,223,235	117	1,006,722	53,822	75,841	86,850	82.3	4.4	6.2	7.1
1914	11,160	1,350,360	121	1,104,840	55,800	89,280	100,440	81.8	4.3	6.6	7.5
1915	11,509	1,392,589	—	1,139,391	57,549	92,072	103,581	81.8	4.1	6.6	7.5

(1) The total number of members has been calculated by multiplying the average number of the members of the associations covered by the enquiry and active at the end of each year by the number of such associations. Since however the enquiry was not completed for 1915 the average number of members in 1914 was adopted for that year.

TABLE III. — Number of Co-operative Societies classified according to their Object and Organization.

Year	Number of associations classified according to their object				Percentage				Number of associations classified according to their organization				Percentage		
	Associations for credit and other operations	Associations for sale and other operations	Associations for purchase and other operations	Associations for production and other operations	Associations for credit and other operations	Associations for sale and other operations	Associations for purchase and other operations	Associations for production and other operations	Limited liability	Unlimited liability	Limited liability with guarantee	Total	Limited liability	Unlimited liability	Limited liability with guarantee
1903	549	152	224	78	63.1	17.5	25.7	9.0	327	529	14	870	37.6	60.8	1.6
1904	731	237	333	121	61.0	19.2	27.0	9.8	465	754	13	1,232	37.8	61.2	1.0
1905	986	344	492	178	59.0	20.6	29.4	10.7	590	1,067	14	1,671	35.3	63.9	0.8
1906	1,370	595	916	265	55.5	24.1	37.1	10.7	1,026	1,405	39	2,470	41.5	56.9	1.6
1907	1,915	920	1,483	538	56.9	27.3	44.3	10.6	1,499	1,788	76	3,363	44.6	53.2	2.2
1908	2,681	1,335	2,273	536	61.1	30.4	51.8	12.2	2,089	2,214	88	4,391	47.6	50.4	2.0
1909	3,823	1,989	3,292	738	65.1	35.0	57.9	13.0	2,917	2,637	136	5,690	51.3	46.3	2.4
1910	5,331	2,904	4,247	908	72.9	39.7	49.8	12.4	4,204	2,938	166	7,306	57.5	40.2	2.3
1911	6,566	3,495	5,208	1,102	75.8	40.3	60.1	12.7	5,235	3,235	193	8,663	60.4	37.4	2.2
1912	7,736	4,109	6,086	1,280	79.9	42.4	62.8	13.2	6,105	3,368	210	9,683	63.0	34.8	2.2
1913	8,530	4,337	6,710	1,461	81.6	43.4	64.2	14.0	1,805	3,340	220	10,455	65.1	32.8	2.1
1914	9,274	4,885	7,244	1,599	83.1	43.8	64.9	14.3	7,333	3,602	225	11,160	65.7	32.3	2.0
1915	9,738	5,111	7,452	1,673	84.6	44.4	64.8	14.5	7,635	3,644	230	11,509	66.2	31.7	2.0

TABLE IV. — *Movement towards increase of Capital of Co-operative Societies (I).*

Year	Total amount of paid-up shares (in years)	Total amount of reserve funds (in years)	Total amount borrowed (in years)	Total amount of savings (in years)	Total (in years)	Average capital of an association (in years)	
						Associations for cre- dit and associations for cre- dit and other operations	Other associations
1903	1,440,344	140,057	298,813	285,303	2,164,517	2,679	2,159
1904	2,053,388	294,911	423,146	402,776	3,174,221	2,784	2,248
1905	2,264,142	427,754	774,791	692,964	4,559,651	3,016	2,314
1906	3,477,485	677,237	1,276,540	1,400,152	6,831,414	3,221	2,199
1907	4,988,457	999,406	2,596,629	2,922,955	11,505,447	4,078	2,552
1908	6,749,791	1,060,694	4,375,254	4,348,624	16,525,363	4,395	2,773
1909	8,355,651	1,443,382	4,324,770	6,343,611	20,467,414	4,141	2,482
1910	11,093,544	2,990,088	4,837,896	9,873,012	27,894,540	4,318	2,466
1911	13,382,168	2,618,164	8,246,566	14,437,660	38,984,558	5,032	2,833
1912	16,401,065	3,858,647	10,992,626	20,104,734	51,447,072	5,837	3,227
1913	19,443,546	5,208,618	13,729,130	24,538,328	62,719,622	6,529	3,652
1914	22,320,000	6,863,400	16,449,840	26,940,970	72,574,210	7,179	2,928
1915	23,018,000	7,078,035	16,964,266	28,288,890	75,349,191	—	—

(1) This table shows the amount at the end of each year, calculated by the method explained in the note to table II.

TABLE V. — *Development of the Business of Co-operative Societies (I).*

Year	Amount of circulating capital (in <i>yens</i>)	Total amount of loans (in <i>yens</i>)	Credit Transactions		Total value of sales made (in <i>yens</i>)	Total value of purchases made (in <i>yens</i>)
			Total amount of savings (in <i>yens</i>)	Total amount of loans made (in <i>yens</i>)		
1903	3,509,393	817,318	1,290,347	2,563,719	2,157,694	223,271
1904	4,657,356	910,997	1,412,454	3,314,394	3,814,825	426,591
1905	7,803,908	2,288,130	2,341,174	4,678,920	4,387,295	1,538,791
1906	12,263,603	3,380,729	4,728,152	7,150,160	6,912,232	2,619,165
1907	25,364,695	8,072,606	11,304,226	15,410,188	10,410,989	5,167,653
1908	34,797,867	12,577,677	14,418,686	19,436,357	19,691,047	9,440,635
1909	44,899,176	15,528,232	19,571,963	28,510,072	17,145,359	7,914,488
1910	56,671,558	16,757,412	26,724,729	34,806,099	18,917,207	10,794,472
1911	80,056,032	25,789,751	37,971,178	49,704,620	32,049,655	16,502,072
1912	110,900,883	35,565,313	55,075,678	71,306,503	32,444,911	22,132,348
1913	139,342,701	46,165,453	68,725,093	91,152,587	35,465,670	27,674,315
1914	155,171,470	52,027,920	73,960,150	103,120,510	37,204,160	26,346,428
1915	161,411,543	53,654,958	77,660,550	108,237,870	38,925,376	27,121,109

(1) As it was impossible to show in figures the importance of the business of the associations for production this has not been taken into account in this table. It has been drawn up by the method explained in the note to table II. The amount of the circulating capital has however been calculated by adding to the amount of the paid-up shares and the reserve funds at the end of each year the amount of the loans and savings paid each year, including sums carried over from the preceding year.

TABLE VI. — *Movement towards the Federation of Co-operative Societies.*
 a) Increase in number of federations, classified according to their object.

Year	Credit	Sale	Purchase	Sale and purchase	Credit and sale	Credit and purchase	Credit sale and purchase	Credit sale purchase and production	Total
1910	3	2	—	—	3	1	3	1	13
1911	9	1	1	—	3	4	4	1	23
1912	15	2	1	1	3	5	5	2	34
1913	19	2	3	2	3	12	10	2	53
1914	25	2	6	3	3	10	13	1	63
1915	30	3	7	4	4	9	13	1	71

b) Movement of the business of federations (1).

Year	Total number of federations	Number of federations examined	Number of associations federated	Total amount of paid-up shares (in years)	Amount of reserve fund (in years)	Total amount borrowed (in years)	Total amount of savings (in years)	Amount of loans made (in years)	Total value of sales (in years)	Total value of purchases (in years)	Excess (in years)
1912	34	28	1,164	151,649	32,083	5,858,823	805,374	1,085,776	7,955,628	126,899	24,443
1913	53	47	2,043	227,784	48,805	7,534,625	1,310,018	1,865,764	8,400,736	119,263	47,843
1914	63	55	2,648	325,824	85,528	7,750,678	1,475,148	2,376,087	8,998,584	317,077	97,567

(1) This table does not give the figures for all the federations existing at the end of each year but only the figures for the federations covered by the enquiry.

TABLE VII. — General View of Co-operative Societies

Prefecture	Total number of associations at the end of December 1914	Number of associations examined	Total number of members	Total amount of paid-up shares (in yen)	Total amount of reserve fund (in yen)	Total amount borrowed (in yen)	Excess (in yen)
Hokkaido	144	95	7,478	114,163	39,096	125,934	3,977
Tokyo	94	73	13,382	282,518	84,173	139,500	26,191
Kyoto	223	203	33,825	606,104	235,501	1,501,130	65,525
Osaka	120	97	14,908	239,439	115,732	971,265	26,411
Kanagawa	123	109	11,595	219,357	75,106	131,385	2,743
Hyogo	690	617	60,460	1,246,457	346,557	2,656,112	111,371
Nagasaki	128	103	17,789	138,730	37,583	474,326	11,000
Niigata	420	396	56,743	1,182,450	287,568	1,329,274	144,540
Saitama	345	327	44,036	814,061	229,045	906,501	80,980
Gunma	483	449	44,642	768,185	176,459	1,227,812	59,461
Chiba	343	339	34,713	748,808	154,727	431,142	76,380
Ibaraki	347	274	21,310	503,763	182,387	566,591	68,880
Tochigi	193	154	17,466	578,685	195,724	688,775	71,680
Nara	124	115	8,266	158,410	35,807	183,596	18,780
Miye	340	274	35,368	520,899	110,185	1,022,217	60,480
Aichi	396	405	33,654	599,016	151,700	1,168,172	76,620
Schizuoaka	237	233	29,557	801,397	309,147	732,315	167,200
Iamanashi	134	127	7,322	194,208	70,272	860,074	21,190
Shiga	111	113	33,633	363,431	111,120	865,208	41,870
Gifu	249	247	24,518	412,510	101,380	565,052	53,170
Nagano	486	449	34,737	757,384	313,126	4,417,532	83,350
Miyagi	198	181	12,047	218,898	70,557	220,509	20,440
Fokushimo	357	327	25,826	671,640	267,340	2,575,034	50,110
Iwate	289	236	18,831	318,341	110,934	245,471	40,220
Aomori	322	266	18,150	331,994	98,866	557,222	41,180
Yamagato	204	181	14,960	319,769	82,611	473,458	3,580
Akita	194	205	19,713	328,711	33,055	156,777	12,180
Fukui	212	200	13,480	262,190	58,650	3,776,316	31,460
Ishikawa	176	162	8,818	140,914	35,469	385,808	16,680
Toyama	242	209	19,594	563,531	148,759	1,600,799	76,700
Tottori	182	147	22,047	263,330	95,376	1,290,068	25,200
Shimane	237	226	48,596	460,415	183,316	1,233,005	7,740
Okayama	386	348	53,036	664,752	209,585	1,144,254	110,000
Hiroshima	370	309	59,294	590,090	228,049	1,490,817	119,000
Yamaguchi	220	215	65,377	546,227	234,056	1,875,067	83,350
Wakayama	175	157	15,381	255,419	61,415	324,162	3,750
Tokushima	104	97	7,547	90,702	24,366	246,753	9,460
Kagawa	137	127	30,844	536,051	125,403	751,981	60,220
Ehime	197	177	28,266	510,110	155,706	1,501,107	76,460
Kochi	141	122	10,920	85,044	17,007	86,825	12,110
Fukuoka	217	168	24,854	440,665	123,176	384,064	65,780
Oita	249	200	16,474	171,965	46,174	206,268	15,780
Saga	173	155	12,913	194,196	65,607	568,720	37,220
Kumamoto	126	109	11,517	216,282	58,132	313,069	20,420
Miyazaki	136	90	5,063	92,583	30,516	104,781	0,740
Kagoshima	143	122	40,843	237,556	110,214	2,649,487	1,740
Okinawa	43	33	13,489	159,781	90,804	342,906	33,150
Totale	11,160	9,968	1,204,232	19,831,151	6,127,559	46,474,667	2,438,540
	10,455	9,328	1,090,475	17,169,185	4,647,149	41,189,031	2,261,550

l, classified by prefectorates (1914).

Credit business (in yens)		Selling business (in yens)		Buying business (in yens)		Business of production (in yens)		
Total amount of savings	Total amount lent	Number of associations examined	Total amount of sales	Number of associations examined	Total amount of purchases	Number of associations examined	Costs of production	Costs of the year
45,520	276,668	60	842,240	53	406,504	2	—	38
283,633	589,529	18	32,510	50	803,392	13	424	2,995
6,952,483	4,715,411	80	353,833	139	431,979	12	—	15,728
2,616,940	2,097,570	22	90,989	81	481,370	4	—	330
248,031	444,389	38	159,904	74	370,541	19	3,628	189
4,161,197	5,733,743	299	790,910	433	1,313,111	81	384	7,983
554,723	829,016	51	162,714	69	406,820	2	—	1,213
3,722,467	5,168,264	124	996,798	209	385,898	32	5,614	2,297
1,341,480	2,476,057	180	1,380,519	144	451,980	51	338	14,351
1,228,501	1,920,749	292	8,783,812	125	351,828	107	4,510	59,797
1,137,493	2,176,722	57	318,941	128	398,954	11	541	1,594
681,494	1,570,584	139	425,285	195	606,888	49	4,088	2,118
398,492	1,381,011	90	104,830	96	542,538	14	—	7
375,987	488,015	22	12,067	53	162,873	4	18,281	16
2,306,690	2,819,081	158	721,260	229	816,503	29	9,234	7,643
2,917,560	2,986,033	104	1,574,836	341	1,190,604	25	65	10,819
1,647,357	2,224,132	114	651,244	163	544,250	46	—	46,118
168,752	512,447	20	657,709	74	156,484	12	—	897
2,936,345	2,307,310	81	1,206,864	87	444,005	11	421	207
1,181,007	1,644,662	101	346,706	196	467,328	41	—	8,940
1,074,984	5,679,188	143	1,265,130	298	558,671	82	1,124	7,004
110,589	585,472	68	69,672	127	149,995	23	—	228
560,654	2,321,860	73	1,599,189	203	481,733	18	21,297	1,479
124,559	879,171	97	185,766	120	129,521	45	16,424	382
111,456	783,431	117	377,971	152	220,377	43	—	2,738
360,823	1,097,352	41	353,795	82	133,178	25	—	5,458
105,638	640,536	53	63,859	96	100,458	15	6,172	1,005
566,567	3,638,934	85	1,762,139	166	3,168,068	17	519	2,086
175,156	543,196	119	396,591	132	362,522	57	267	926
1,298,853	2,430,383	140	453,466	163	370,955	17	529	307
1,022,480	1,495,238	21	438,700	80	162,349	8	8	4
1,967,686	3,006,348	42	478,763	67	393,345	9	—	140
2,424,191	2,999,801	249	1,376,088	290	1,165,799	71	10,464	2,812
4,224,714	4,316,480	54	191,969	242	1,200,710	25	—	102
10,237,498	7,869,170	93	285,220	155	594,991	22	16	415
1,540,044	1,509,892	32	12,726	122	270,188	3	3	970
209,713	242,593	49	99,957	83	381,659	21	—	2,991
2,282,737	2,659,259	22	37,963	38	183,399	3	4,452	—
1,637,311	2,969,740	21	29,635	147	647,214	17	4,352	371
264,825	185,031	71	74,173	82	246,399	25	4,186	6,237
1,617,856	2,178,962	40	169,660	104	725,996	2	—	245
402,293	607,293	163	147,593	184	211,041	34	195	3
364,858	845,224	105	354,375	135	204,968	13	—	6,916
137,176	627,365	26	135,174	74	237,450	8	—	—
29,844	261,430	22	144,452	32	46,600	7	—	1,562
101,590	1,174,585	42	1,144,965	83	219,271	37	—	6,400
42,038	798,659	14	26,672	18	22,050	3	—	—
57,952,313	94,708,009	4,109	31,295,574	6,412	23,322,775	1,212	117,545	234,078
53,592,869	84,345,528	2,972	31,049,074	5,970	24,622,304	1,203	115,385	163,883

Comparison between Total Number of Associations and Number of Towns, Boroughs and Villages, and between Total Number of Members of Co-operative Associations and Number of Households.

Prefectures	Number of associations at the end of December 1915	Number of towns, boroughs and villages at the end of December 1915	Number of associations per hundred towns, boroughs and villages	Total number of members of associations examined at the end of December 1914	Total number of households at the end of December 1914	Average number of households for one co-operator of December 1914	Number of agriculturist members of associations examined at the end of December 1914	Total number of agriculturist households at the end of December 1914	Average number of agriculturist households for one co-operator
Hokkaido	183	341	53.7	7,478	340,014	45.5	4,187	169,857	40.6
Tokyo	112	207	54.6	13,382	752,706	56.2	3,632	65,228	17.9
Kyoto	227	282	80.5	33,825	332,361	6.9	25,503	82,677	3.2
Osaka	114	299	38.1	14,908	494,931	33.2	8,684	94,853	10.9
Kanagawa	164	200	62	11,595	206,998	17.8	9,607	78,418	8.1
Hyogo	703	428	164.3	60,460	402,134	6.7	47,861	189,369	4
Nagasaki	126	200	63	17,789	179,670	10.1	11,470	111,749	9.7
Nagata	421	418	100.7	56,743	304,623	5.4	45,000	198,055	4.4
Saitama	340	372	91.1	44,036	210,820	4.8	38,717	164,785	4.3
Gunma	478	208	229.8	44,642	155,958	3.5	42,007	108,678	2.6
Chiba	353	349	103.5	34,713	231,229	6.7	28,434	160,952	5.7
Ibaraki	365	381	95.8	21,310	216,975	10.2	18,072	169,013	9.4
Tochigi	192	176	109.1	17,466	152,254	8.7	14,390	97,292	6.8
Nara	126	155	81.3	8,266	97,906	11.8	7,272	62,671	8.6
Miyagi	325	340	95.5	35,368	198,910	5.6	29,278	119,588	4.1
Aichi	408	265	153.9	33,634	393,550	11.7	29,599	206,789	7
Shizuoka	243	341	71.3	29,557	241,642	8.2	24,440	158,745	6.5
Yamanashi	150	243	61.7	7,322	97,786	13.4	6,503	77,848	12
Shiga	118	203	58.1	31,613	132,848	3.9	25,575	93,775	3.7
Gifu	260	344	75.6	24,518	100,400	8.1	20,084	142,650	7.1
Nagano	500	314	160.9	35,737	256,154	7.4	11,667	210,027	6.4

Akita	202	240	84.2	19,713	136,234	6.9	16,258	80,434	4.9
Fukui	214	179	119.6	13,480	114,720	8.5	12,141	74,551	6.1
Ishikawa	185	221	83.7	8,818	151,562	17.2	7,882	81,833	10.4
Toyama	270	272	99.3	19,594	136,682	7	16,567	80,431	4.9
Tottori	184	212	86.8	22,047	79,628	3.6	18,635	55,413	3
Shimane	250	288	86.8	48,596	148,878	3.1	37,774	113,740	3
Okayama	380	402	94.5	53,036	244,266	4.6	44,378	169,833	3.8
Hiroshima	385	432	89.1	59,294	327,048	5.5	52,381	204,231	3.8
Yamaguchi	224	225	99.6	65,377	214,732	3.3	48,769	131,996	2.7
Wakayama	188	232	81	15,381	140,906	9.2	11,944	78,241	6.6
Tokushima	105	140	75	7,547	128,835	17.1	5,729	81,720	14.2
Kagawa	144	179	80.4	30,844	136,118	4.4	24,759	90,781	3.7
Ehime	197	298	66.1	28,266	198,241	7	22,561	135,947	6
Kochi	135	198	68.2	10,920	124,028	11.4	9,462	81,534	8.6
Fukuoka	232	345	67.2	24,854	323,730	13	19,611	156,098	8
Oita	235	258	91.1	16,474	154,145	9.4	14,629	127,224	8.7
Saga	175	135	129.6	12,913	110,039	8.5	10,803	69,816	6.5
Kumamoto	128	365	34.8	11,517	198,044	17.1	10,302	143,650	13.9
Miyazaki	147	100	147	5,963	97,367	16.3	5,309	72,240	14.3
Kagoshima	175	139	125.2	40,843	217,504	5.3	37,949	192,499	5.1
Okinawa	46	55	83.6	13,489	101,584	7.5	13,259	82,984	6.3
Total	11,509	12,329	93.3	1,204,232	9,687,665	8	990,321	5,527,973	5.6
Preceding year	11,160	12,342	90.4	1,090,475	9,601,845	8.8	897,114	5,523,035	6.2

Notes. — (1) The total number of members of co-operative societies and that of agriculturist co-operators have been calculated without taking into account any but the examined associations. — (2) The number of households has been established on the basis of enquiries carried out by agricultural societies and of official statistics. For the prefecture of Okinawa however the industrial statistics drawn up by the prefecture have been taken as basis. — (3) To calculate the total number of co-operators the average number of members of one association, as indicated in table II, was provisionally taken as basis.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH INDIA.

THE MADURA-RAMNAD CENTRAL CO-OPERATIVE BANK, LIMITED. — *The Madras Bulletin of Co-operation*, Vol. IX, No. 2, Royapettah (Madras), August 1917.

This central co-operative bank of Madras has made certain rules as to its issue of loans.

Classification of Societies. — The societies affiliated to the banks are divided into three classes. Class I consists of those which are in the opinion of the bank's board well managed ; class II of those which are able to manage their own affairs but are not well managed in the board's opinion ; and class III of all the others. At the beginning of each business year a list of societies assigned to classes I and II. will be submitted to the board for approval by the secretary.

Classification of Loans. — Loans are divided into the three categories of " cash credit loans ", " short term cash credit loans ", and " short-term and long-term loans ". The secretary is authorized to advance sums in cash credit and on short-term cash credit accounts on the application to the bank of the societies privileged to draw upon it. Short-term and long-term loans may be made only with the board's sanction, and the previous recommendation of the Assistant Registrar must in some cases be obtained for them.

Cash Credit Loans. — These loans will be granted only to societies belonging to class I. Their maximum limit will be fixed proportionately to a society's normal needs in a year, as these are disclosed by the annual returns. The loans may not be made for more than a year but are renewable.

Societies applying for cash credit loans must submit on or before certain fixed dates : 1) a statement in abstract of their monthly receipts and disbursements ; 2) a statement as to the property of their members if they have unlimited and as to their share capital if they have limited liability ; 3) their annual balance-sheet and profit and loss statement ; 4) a statement as to their overdue loans and interest for the half year ; 5) a statement as to deposits and other borrowings for the half year.

The qualified societies may draw from the Central Bank any sum they need according to the prescribed form, provided the total indebtedness to the bank do not at any time exceed the maximum limit of cash credit. Interest shall be calculated at the usual rate of $7\frac{1}{2}$ per cent. on daily balances.

a fraction of ten rupees being treated as ten full rupees, and shall be added to the principal at the end of each half year. Societies must execute a pro-note for the maximum amount fixed in the order sanctioning cash credit.

Short-Term Cash Credit. — Credit of this description may be allowed to societies in classes II and III.

Societies may draw from the Central Bank loans to be used exclusively for making short-term loans to their members. A society must fix the maximum amount it will need for making such loans at its annual meeting, held before 15 August. Any sum thus needed may be drawn, in the form prescribed, from the Central Bank — the purpose for which it is drawn, the date of repayment and the security offered being stated — provided the total amount outstanding do not exceed the limit fixed at the annual meeting. All sums so borrowed shall be repayable with interest before the 31st of May next after the date of the loan.

In order to qualify to receive short-term cash credit, societies must submit to the Central Bank, before certain fixed dates, a statement in abstract as to monthly receipts and disbursements, a statement as to the property of members, and an annual balance-sheet and profit and loss statement.

They must execute a pro-note for the maximum amount of short-term cash credit fixed at the annual meeting. In calculating interest a fraction of ten rupees is treated as ten full rupees.

Long and Short-Term Loans. — Loans of this description may be made with the sanction of the board after full information has been obtained from the bank supervisors as to the working of societies applying for them and the needs of the members of these. A society is not entitled to such a loan until it has supplied all the particulars required in the form of application. The board of management will fix the dates of repayment, no loan being made however for more than ten years. Interest and instalments of principal are payable annually, within the quarter between 1 April and 30 June. Statements as to the property of the members of the applying societies must be submitted annually before 30 December, this being an indispensable condition of obtaining a loan.

UNITED STATES.

1. CO-OPERATIVE BULL ASSOCIATIONS. — WINKLER (Joel G.) in *Yearbook of the Department of Agriculture* 1916, Washington, Government Printing Office, 1917.

Co-operative Bull Associations are formed by farmers for the joint ownership, use and exchange of good, purely bred bulls. They also may encourage the careful selection of cows and calves, introduce better methods of feeding, help their members to market dairy stock and dairy products, intelligently fight contagious diseases of cattle, and otherwise help to raise the level of the dairy industry.

The first Co-operative Bull Association in the United States of which record exists was organized in 1908 by the Michigan Agricultural College. On 1 July 1916 thirty-two of these associations were active in the country, and they had a total membership of 650 and owned about 120 purely bred bulls. The following table shows their growth.

State	1908	1909	1910	1911	1912	1913	1914	1915 (1)	1916
Michigan	1	4	7	6	10	15	15	14	14
Minnesota	—	1	1	1	1	2	2	2	3
North Dakota	—	—	—	—	1	2	1	1	1
Maryland	—	—	—	—	1	1	1	1	1
Vermont	—	—	—	—	—	—	1	1	1
Wisconsin	—	—	—	—	—	—	1	1	1
Connecticut	—	—	—	—	—	—	—	1	1
Maine	—	—	—	—	—	—	—	1	1
Oregon	—	—	—	—	—	—	—	—	1
Oklahoma	—	—	—	—	—	—	—	—	1
Iowa	—	—	—	—	—	—	—	—	1
South Carolina	—	—	—	—	—	—	—	—	1
Massachusetts	—	—	—	—	—	—	—	—	1
North Carolina	—	—	—	—	—	—	—	—	1
Illinois	—	—	—	—	—	—	—	—	1
Total	1	5	8	7	13	20	21	22	32

(1) The 22 associations existing in 1915 had 540 members and owned 3,600 cows and 90 bulls.

Co-operative Bull Associations are especially useful to small herds which cannot afford singly to lay out on a valuable bull the percentage of their capital which his price would represent. The typical association of the United States is composed of from fifteen to thirty farmers who jointly own five "breeding blocks" and assign one bull to each block. As many as fifty or sixty cows may belong to the farmers in the block and the bull thereof should be kept on a conveniently situated farm. The blocks are numbered, and to prevent inbreeding each bull is moved from one to the next block every two years. If all the bulls live and all are kept until each has made a complete circuit, no new bulls need be bought for ten years. Thus each member, by paying only a small part of the purchase-price of one bull, has the use of good purely bred bulls for many years. Ordinarily the purchase-price and the expense of supporting the bulls are distributed

among the members of the association according to the number of cows owned by each.

The Department of Agriculture made a study of eight districts in the States of Iowa, Minnesota and Massachusetts in which there were no associations, obtaining information as to 1,219 farmers owning 817 bulls of the average value of \$76 each. Had these farmers been organized in associations they could nearly have divided the number of the bulls necessary to them by four, and therefore by the same initial outlay they could have secured bulls four times as valuable as those they had, and could have fed them at a quarter the actual expenditure on feeding. This fact is well illustrated by data obtained from one of the first associations to be organized under the direction of the Department of Agriculture. Before it was formed the average value of its members' bulls was \$55 each, but the average price which it paid for each of its registered bulls was \$240.

One hundred and fifty farms in Maryland, Michigan and Minnesota, which were questioned as to the value of Co-operative Bull Associations, estimated that the use of sires belonging to one of these organizations increased the value of the offspring in the first generation by from 30 to 88 per cent. — on an average by 65 per cent.

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2. THE ESSENTIALS OF SUCCESSFUL CO-OPERATIVE FRUIT AND VEGETABLE CANNERIES, — KERR (W. H.); "Business Essentials for Co-operative Fruit and Vegetable Canners," in *Yearbook of the United States Department of Agriculture*, 1916. Washington, Government Printing Office, 1917.

Growers of fruit and vegetables in many parts of the United States have thought to become rich by disposing in a co-operative cannery of such of their surplus products as could not be marketed in a fresh state. Such hopes have been largely unrealized. On some \$158,000,000 worth of canned and dried fruit and vegetables marketed in 1914 the growers sold only \$3,500,000 worth.

Practically all the co-operative canneries in the United States are found in the Pacific North West and California. These canneries have individual turnovers ranging from \$50,000 to \$1,500,000. Together with the Oregon Agricultural College, the Office of Markets and Rural Organization made a survey of the canning industry of the Pacific North West; and it also investigated co-operative canning plants in California and other parts of the United States. These studies enabled the essentials of success and the reasons for failure in this industry and this country to be ascertained.

It should be borne in mind that a canning business should not exist for by-products, that if built up primarily to get rid of lower-grade fruit and vegetables it is not likely to be successful. Many canneries have failed because they were organized only to utilize that portion of a fruit or vegetable crop which could not be marketed in its fresh state because of its deteriorated condition or bad quality.

The most successful co-operative canneries now at work handle a wide variety of produce through a long season, some beginning with strawberries in May and ending in December with late vegetables. By making use of the various crops as they ripen the busy season may be made to last about six and a half months.

The cannery should be situated as near as possible to the centre for the production of its material. The quantity of produce delivered to it as material should moreover allow it to transact such a volume of business that the overhead expenses will represent a small unit of cost per case. Canneries should generally be near a centre of population from which they can secure at a reasonable price the necessary pickers and other supplementary help. In many farmers' co-operative canneries the skilled labour used in the manufacturing department is supplied by the sons and daughters of the farmer co-operators. These young people earn pocket money and the cannery secures reliable and skilled help, year by year. In some districts the berry-picking season is looked upon as a holiday time, and many families in the Pacific North West and in California look forward to it.

From the neighbouring towns they — especially the women and children — move into the berry fields and spend from two to six weeks as pickers. They are fairly well paid and have an excellent outing. One cannery employs as many as 15,000 pickers in a season and provides good accommodation for camping.

The sanitary condition of a cannery should be satisfactory. There should be a plentiful supply of good water. The roads should be sufficiently good and there should be suitable provision for transport.

Proximity to markets is important.

Managers of several co-operative canneries state that a lack of sufficient capital is their chief handicap. Canning is a manufacturing business and therefore needs a much larger capital than the average co-operative enterprise. To be successful the association should have enough paid-in capital to make the plant and equipment practically free of debt when the first canning season opens. A considerable sum is needed for operating expenses before the final returns for canned goods are received, this last event often taking place eighteen months or more after the raw material is delivered. A liberal fund is therefore necessary for the making of advances to growers when they deliver their produce. Such advances range from 35 to 65 per cent. of the estimated value of the produce. If the plant be free of debt, enough money can usually be obtained from banks to finance the business of the early season, and in the later season additional money can be raised on warehouse receipts of the canned goods. Some of the larger canneries have as much as \$200,000 worth of canned goods in their warehouses at one time, and need a proportionately large surplus fund and good credit to finance their business during the canning season. Such credit was possessed by a Western farmers' cannery which recently bought a trainload of sugar for its year's business, having secured for such purpose a loan of \$85,000 from one bank.

Membership of a co-operative cannery should not be acquired for less

than \$25. A grower who has enough produce to interest him in the cannery ought to be willing to invest at least \$100 on acquiring membership or to take stock up to that amount.

The advice of someone well qualified to judge of buildings and equipment should be secured when the purchase of these is being considered; and a cannery should not be constructed except on plans made by experienced engineers or cannery men.

The manager should be familiar with manufacturing processes and with organization, should have a knowledge of accounts and should be an efficient salesman. In the larger canneries he should have as assistant a manufacturer, who should have had practical experience in the particular kind of canning for which he is engaged.

A regular supply of the right kinds of produce is necessary if a cannery is to do sufficient business. Therefore contracts for supplies should be, if possible, for a number of years. Wherever the size of the business justifies the expense a cannery should employ a "field man" to work among the farmer co-operators, helping them to solve their difficulties, hearing their complaints, explaining the principles and advantages of association.

Some canneries which handle large quantities of berries have a department for sending fresh fruit to distant markets. When the market for fresh fruit is profitable all fruit of suitable quality is sent away — the ripe fruit goes to neighbouring markets and fruit ready for immediate use to the cannery. When markets are not favourable all the fruit is canned and held until it can be sold at fair prices. One co-operative canning association has sent as many as twenty-one refrigerator-carloads of fresh red raspberries in one express train, while it was operating two large canneries. Several co-operative canneries in the Pacific North West also operate evaporators in which plums, loganberries, apples and some raspberries are dried. Other canneries have vinegar plants.

It is necessary that the manager keep in close touch with markets and know of their demands and conditions of trade preferences and of any improvements made in the canning business, in order that he may market products to the best possible advantage. A large portion of a season's output is sold for future delivery, and therefore great care must be taken in estimating output in order to prevent an oversale.

It may happen that cars are sold as early as April for delivery in September or October.

In one State a large number of the co-operative canneries have formed an association and appointed a joint agent, who is a canned goods broker, to handle their output. There is much need for greater co-operation among farmers' canneries for the purpose of standardizing output and forming a central agency for sales, in so far as the law allows.

Part II: Insurance and Thrift

ITALY.

COMPULSORY INSURANCE AGAINST THE ACCIDENTS OF AGRICULTURAL LABOUR.

OFFICIAL SOURCES:

BILL INTRODUCED BY THE MINISTER OF INDUSTRY, COMMERCE AND LABOUR AT THE SITTING OF 26 MARCH 1917: COMPULSORY INSURANCE AGAINST THE ACCIDENTS OF AGRICULTURAL LABOUR. Senate of the Kingdom. Doc. No. 360.

REPORT OF THE CENTRAL OFFICE OF THE SENATE ON THIS BILL. Dec. No. 360. A LIEUTENANCY DECREE-LAW, 23 August 1917, No. 1450, as to Provision for Compulsory Insurance against the Accidents of Agricultural Labour. *Gazzetta Ufficiale del Regno d'Italia*. Rome, No. 218, 14 September 1917.

L'ASSICURAZIONE OBBLIGATORIA CONTRO GLI INFORTUNI SUL LAVORO AGRICOLO (*Compulsory Insurance against the Accidents of Agricultural Labour*). *Annali del Credito e della Previdenza (Annals of Credit and Thrift)*, Series II, Vol. 18, Ministero per l'Industria, il Commercio e il Lavoro (*Ministry of Industry, Commerce and Labour*), Direzione Generale del Credito e della Previdenza (*General Direction of Credit and Thrift*). Rome, 1916.

Last July the Senate examined and approved the bill (No. 360) introduced by Signor de Nava, Ministry of Industry, Commerce and Labour, at the sitting of 26 March 1917, for compulsory insurance against the accidents of agricultural labour; and the government, in response to numerous desires expressed on all sides, has interpreted the feeling of the country and promoted the immediated publication, by means of a decree-law, of the provisions voted by the Senate.

The important reform, thus sanctioned by the lieutenantcy decree of 23 August 1917, 1450, fills one of the chief gaps in Italian social legislation, placing agricultural labourers, where the provision for insurance against accidents attendant on employment is concerned, on the same footing as industrial workers who are cared for by the law (single text) of 31 January 1904, No. 51.

The idea informing the present measure is that of guaranteeing indemnification to victims of accidents as surely as possibly and at the least possible cost to landowners. Pending the enactment of rules for its execution, for the compilation of which arrangements have been made and which we will notice in due time, we will give the chief provisions of the decree.

§ 1. THE LAW NOW IN FORCE
AS TO ACCIDENTS ATTENDANT ON EMPLOYMENT.

The problem of insurance against the accidents of agricultural labour had, as has been said, already been faced and partly solved by the law we have mentioned of 31 January 1904, No. 51, as to the accidents of industry, which law constituted the first step taken in this sphere. Its application is indeed limited to such agricultural labour as, by reason of its nature, or its nature together with the fact that it requires the employment of more than five workmen, or the circumstance that machinery is used to perform it, involves serious danger. On this principle the law imposes the obligation of insuring agricultural labourers in the following circumstances :

a) if more than five of them are employed on works of hydraulics, on works involved by the systematization of avalanches and mountain-basins, on woodcutting and clearing and the transport of timber to depositories on the banks of rivers and torrents or beside cart roads, and on floating timber from these depositories on rivers and torrents (art. 1, no. 2) ;

b) if more than five of them are employed on the industrial work of olive-presses, cellars, vintners' establishments and similar labour, in which machinery not directly set in motion by the workman using it is employed (art. 1, no. 3) ;

c) if any number of them work on machines worked by mechanical power or the motors of these, such machines having an agricultural use (art. 1, no 4) ;

d) if they work for the anti-hail guns or other anti-hail apparatus (art. 1, no. 5).

It is seen therefore that the majority of agricultural labourers have hitherto remained outside the law's guardianship. The fact that the use of agricultural machinery is still comparatively limited, and the circumstance that in the open-air work, which is that usually necessitated by agriculture, the use of machinery not moved by mechanical power does not, by the terms of the law, imply the compulsion to insure, have had the consequence that while labourers employed on agriculture are much more numerous than those employed on industry, far fewer of the former than of the latter come within the law's sphere, so that " in regard to the mass of workpeople to be safeguarded, the extension of the compulsion to insure to work executed without using machinery is more imperative in the case of agriculture than in that of manufacturing industry ".

We should add that the theory, so often given out, that not only is agriculture less dangerous than industry, but that the number of agricultural is so inferior to the number of industrial accidents that to provide insurance against the former is not a matter of urgency, is recognized today to be unfounded. Apart from the continuous increase of machinery on farms, which noticeably increases the number of accidents, many accidents are met with which are due to the specific risks of agriculture. The govern-

ment has therefore thought it opportune to hasten the adoption of provisions which have been the object of long study and respond to "an urgent need of justice" on the part of a numerous class of labourers who make a preponderant contribution to the wealth of the nation (1).

§ 2. THE LIMITS WITHIN WHICH THE DECREE
OF 23 AUGUST 1917 WAS APPLIED AND THE SYSTEM OF INSURANCE.

On the basis of this decree the following persons between the ages of nine and seventy-five are fully insured against the accidents of agriculture:

a) permanent or casual labourers, men or women, employed on farms and in woods;

b) landowners, *métayers* and lessees, and their wives and children, legitimate and other, who habitually practise manual labour on their respective holdings.

c) overseers of farms and forests who receive an average daily wage, comprising payments in kind, of no more than 10 liras, the year being taken to have 300 working days.

For the categories of those employed as above on agriculture and forestry who are contemplated by the law of 31 January 1904, no. 51, the provisions of this law remain in force.

The cultivation of land and woods and the works connected therewith and complementary or accessory thereto, such as the care of plants, irrigation, the care, breeding and management of animals, and the preparation, preservation, conversion and transport of agricultural, animal and forest products, constitute the work of farms and woods.

Thus the insurance applies to cultivation of the land in every form, and the works connected with and accessory to cultivation, independently of the extension of farms and woods and the greater or less gravity of the risks of accidents to which labourers on farms and woods are subject, and independently of relations created by contracts between landowners and labourers.

The insurance covers all cases of accidents by violent means in the course of labour, giving rise to: 1) death; 2) permanent total disability; 3) permanent partial disability reducing working power by more than 15 per cent.; 4) total temporary disability necessitating abstinence from work for more than ten days. Indemnities of this last kind will be payable from the eleventh day of such period of abstinence to the end thereof, up to a maximum limit of ninety days.

(1) The problem of insurance against the accidents of agriculture has been in Italy the object of many projected laws, initiated by ministers or parliament, which we examined in our issues for February 1911 and January and June 1916.

The insurance indemnities payable in the case of the aforesaid accidents are due as in the following table (1) :

Table of Indemnities for the Accidents of Labour.

Age of Victims of Accidents	Indemnities	
	Men	Women
Fatal Accidents:		
from 9 to 12 years old	500	500
from 12 to 15 " "	1,000	750
from 15 to 23 " "	2,000	1,000
from 23 to 55 " "	2,500	1,250
from 55 to 75 " "	1,500	750
Accidents Producing Permanent Total Disability :		
from 9 to 12 years old	1,200	1,000
from 12 to 15 " "	1,800	1,200
from 15 to 23 " "	2,500	1,500
from 23 to 55 " "	3,250	2,000
from 55 to 75 " "	2,000	1,000
Accidents Producing Permanent Partial Disability and diminishing working power by more than 15 per cent:		
The indemnity is calculated on the basis of that fixed for permanent total disability, this being reduced proportionately to the surviving working power.		
Daily Indemnity		
Accidents Producing Temporary Disability:		
from 12 to 15 years old	0.50	0.50
from 15 to 65 " "	1.00	0.75
from 65 to 75 " "	0.75	0.50

Widows who are heads of families are placed on an equality with men as regards the amounts of indemnities.

(1) The table is subject to revision at intervals not less than two or greater than fifteen years.

To the indemnity fixed for the case of a death or of permanent total disability there is added one tenth of its amount for a wife and for every child under fifteen, up to 50 per cent of its amount.

Indemnities are paid as capital, but are paid to the *Cassa Nazionale di Previdenza* to be converted into a life annuity if they bring such an one up to the sum of 300 liras a year or more.

The introduction of fixed indemnities overcomes the difficulty due to the fact that true and rightful wages are not always paid in the industries of agriculture and forestry. Fixed indemnities presume uniform average wages throughout the kingdom, and the presumption is admissible because agricultural wages in the various districts do not show the same disparity as the wages of the manufactory industry. The table we have reproduced shows that indemnities have been fixed very appropriately, the different elements being taken into account. Besides the distinction for sex the distinction for the ages at which accidents occur is important. Above all the fact should be noticed that the families of victims do not suffer, indemnities being increased when the economic consequences of accidents fall on labourers having young children.

The expenses of insurance are paid on a system we will presently explain, and are borne entirely by the owner, lessee or usufructory of the land.

When land is held on lease, or on a profit sharing or *métayage* system, the expenses fall on the owner, lessee or usufructory, if the occupier, *métayer* or cultivator habitually cultivates the farm by his own manual labour. Otherwise the owner, lessee or usufructory may require from the occupier the whole amount of the insurance contribution, and from the *métayer* or cultivator rendering partial profits a quota of such contribution proportionate to the share of the profits of the farm assigned by their contract to this *métayer* or cultivator. Anyone who by direct or indirect retention of wages causes a labourer to sustain the expenses of insurance is punished by a fine up to the limit of 4000 liras.

The management of insurance against the accidents of agricultural labour is temporarily entrusted, until new provision shall be made, to the *Cassa Nazionale di Assicurazione per gli Infortuni degli Operai sul Lavoro* (National Fund of Insurance for the Accidents of Workpeople during Labour) (1). Mutual societies, the funds of consortia and other bodies, which before 26 March 1917 exclusively or mainly insured against the accidents of agriculture, can be recognized by royal decree and allowed to continue

(1) This was founded by the law of 8 July 1883, no. 1473, and is a public institution, the official organization for insurance against the accidents of labour, placed beneath the superintendence of the Ministry of Industry, Commerce and Labour. It is authorized to undertake various kinds of business — collective insurance on the terms of the law of 31 January 1904, no. 51; insurance against civil liability to workmen; voluntary insurance of industrial workers; reinsurance of mutual insurance societies, etc. It is the only institution in Italy which is enabled by a vast ready-made organization, a numerous administrative and technical staff which has experience in this matter, and its own wide experience of the accidents of agriculture, to

their activity temporarily, within the limits and on the conditions established by the regulation, which may oblige all the farms and woods within the spheres of these institutions to belong to them. Moreover a royal decree, promoted by the Ministry of Industry, Commerce and Labour in concert with the Ministry of Agriculture, after hearing on the subject the Technical Committee of Agriculture and the Council of the State, may declare compulsory the constitution of mutual funds among enterprises within determined agricultural and woodland zones, when particular local conditions or other circumstances make this necessary or advisable.

The territory of the kingdom will be divided into insurance areas, each of which will be fixed by royal decree and comprise one or more funds. The *Cassa Nazionale* will manage each area separately.

The needs of each year of business will be supplied by a contribution which will constitute an additional quota of the Treasury tax on rural lands.

Such contributions will be determined for each insurance area in accordance with the extent of its land, the nature of its crops, the labour it needs, and the risks of accidents, by means of tariffs in which the limit of 1.75 li-ras per hectare will not be exceeded, and which will be established by a commission constituted in each area, and approved by a decree of the Ministry of Industry, Commerce and Labour in concert with the Ministry of Agriculture, the Council of Thrift and Social Insurance having been heard on the subject. For determined insurance areas, or single parts of each area, or farms and forestry enterprises of limited extent, these contributions may be commensurate with the land tax on rural lands due to the Treasury.

The regulation will establish what part of annual contributions should be assigned to the constitution of a reserve fund and how such fund should be invested. The sums carried over from each year will go to increase it until it be equal to the sum needed for each year's business, when the insurance contribution will be reduced to the limit necessary each year.

§ 3. LIQUIDATION AND PAYMENT OF INDEMNITIES.

Indemnities for temporary disability will be paid by the offices of each insuring institution according to the rules which will be made by these institutions and approved by the Ministry of Industry, Commerce and Labour. The other indemnities will however be paid according to the rules established by the regulation, by *ad hoc* committees in each insurance area and

assume in the shortest possible time the management of the form of insurance with which we are dealing, and such management was temporarily entrusted to it by the decree-law. Logically such temporary management should become permanent, as was observed by the central office of the Senate when a judgement was given on the excellence of this fund's methods as compared with those of other authorized bodies, all of them being obliged to present to parliament a complete report of the results they have obtained, no later than five years after the decree came into force.

at the offices of the insuring institutions. Each such committee is composed of a president nominated by the insuring institution, a representative of the farms and forestry enterprises and a representative of the labourers, the former representative being chosen from a list proposed by the organizations of agricultural employers, the latter from one proposed by the organizations of agricultural labourers. Where there are no such organizations or where, in the judgement of the Ministries of Industry, Commerce and Labour and of Agriculture, they do not sufficiently represent the two classes to designate representatives, the choice of the latter will be made by these ministries, after they have heard on the subject the delegates of the agricultural organizations of employers and labourers represented in the Higher Council of Labour.

All controversies as to a right to indemnity and as to payment thereof, including those on the indemnity itself, will be settled by the *Commissioni compartimentali arbitrali* (Arbitrating Area Commissions), which will be instituted at the headquarters of every insurance area near the tribunal if there be one, otherwise near the praetorate. By royal decree there may also be constituted more than one arbitrating commissions for the same insuring area if it comprise more than one province or if special local conditions or other circumstances create a recognized necessity for them.

Each commission is composed of five members : a) a tribunal judge, annually chosen by the first president of the Court of Appeal, who is chairman ; but where the headquarters of the insurance area or other town in which a tribunal is situated is not the seat of a tribunal, the praetor of the district in which it is situated presides over the tribunal ; b) two health officers not receiving pay from the insuring institutions ; c) a representative of persons subject to the obligation to insure and a representative of the insured persons.

The decisions of these arbitrating commissions are liable to revision, where the disputes are more important before a Central Commission instituted in Rome at the Ministry of Industry, Commerce and Labour, and composed of a councillor of appeal, a president, two superior officials belonging, respectively, to the Ministry of Industry, Commerce and Labour and the Ministry of Agriculture, two health officers having special scientific and professional aptitudes for business concerned with the accidents of labour and not paid by the insuring institutions, a representative of the persons subject to the obligation to insure and a representative of the insured persons. There is no appeal from the decisions of this commission.

Professional advocates are not heard by the Arbitrating Area Commissions and the Central Commission. The protection of those interested may be entrusted only to the institutions of patronage and assistance which exist for the benefit of labourers who are victims of accidents and their representatives, and which have been approved by the Ministry of Industry, Commerce and Labour. Engagements entered into by those having a right to indemnities with intermediaries, who are paid to take an interest in the liquidation or payment of indemnities, are declared null and void, engagements entered into with the aforesaid institutions being excepted. It is also

provided that the measures to exact the indemnities cannot be relaxed except in the cases and according to the rules established in the regulation, and that every engagement made to escape payment of indemnities or lessen their amount is null.

The decree-law with which we are concerned regulates another delicate matter, namely the indemnified person's right to revision of an indemnity;

This right is mainly limited by the law in force as to the accidents of industry, but it is better regulated for it takes into account the inconveniences to which this law has given rise. It has been found that workpeople, so soon as an indemnity has been liquidated, frequently ask for its revision, stating that their physical condition has become worse since their claim was first considered. Not a few of them repeat this demand several times in the course of the two years fixed by the law, knowing well that the insuring institution, rather than face the expenses of revision, often ends by granting the indemnity asked for. It is therefore provided that a demand for revision, owing to alleged error in the first liquidation, can be admitted only when this liquidation has taken place, and that it can only be admitted once. In the case of a revision owing to a modification in the physical condition of the workman it is established that a demand for this cannot be made until a year after the liquidation of the indemnity, for a certain period of time is necessary in order that such a modification may show itself and translate itself into an effective and permanent reduction of working capacity, and in order to exclude or at least to render more difficult the eventuality of further deterioration which would require successive revisions. In any case the application for a revision must be made within two years of the day of the accident, according to the ruling of the law in force as to accidents to workmen during employment.

§ 4. THE COST OF THE INSURANCE.

One of the most interesting investigations is that into the cost of insurance, the exact determination of which has been a matter of no little difficulty. It depends principally, when once the frequency of accidents has been noted, on the number of persons in favour of whom the insurance is instituted and the amount of the indemnity. According to the anticipatory calculations made, the insurance will extend to nine million persons between the ages of nine and seventy-five. If those persons be also taken into account who are not indemnified in cases of accidents because their age is not within the stated limits, but who indirectly enjoy the benefits of insurance in that they belong to agricultural families, it will be found that the insurance will be to the indirect or direct benefit of a third part of the population.

The cost, for so great a number of persons affected, will be somewhere round 13,000,000 liras, a modest sum in relation not only to the mass of the population benefited but also to the other elements which go to make

up the cost of agricultural and forest production. If this sum be compared with the tax on lands due to the Treasury and the local, provincial and communal administrations, it will be found to represent less than 5 per cent. thereof. On the supposition that labourers on farms and in woods in all districts are wage-earners it represents less than 1 per cent. of wages. On the supposition that the gross agricultural and forest production of all Italy is worth 6,500 million liras, only 2 per thousand of this sum is represented by the thirteen million liras for insurance against accidents, and only 8 per thousand of the average revenue from land which is estimated as equal to a fourth part of the aforesaid gross production.

It should also be remembered that this estimate of the cost of insurance represents an average and is susceptible to reduction in particular agricultural and forest zones. The frequency of accidents in relation to area does indeed vary with the nature of a holding and the kind of crops grown on it, and the tariff of contributions therefore shows only comparatively low premiums for zones agriculturally poor in which, in general, extensive cultivation prevails. For another reason it is permissible to anticipate that the burden will not disturb the equilibrium of the agricultural industry. It appears that in the five years from 1901 to 1905 agriculture was able to support increases in annual wages varying from 30 to 40 per cent. In face of such figures the new burden imposed by insurance against accidents, equal to 1 per cent. of wages, certainly does not seem onerous.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

CANADA.

MODIFICATION OF THE LEGISLATION AS TO INSURANCE AGAINST HAIL. — *Canadian Finance*, Vol. VIII, No. 19; Winnipeg, 3 October 1917.

In order to remove certain features of the Insurance Act of 1910 which were declared *ultra vires* of the Parliament of Canada by a judgement of the Privy Council last year, and in order to make other changes deemed to be necessary and opportune, the entire Insurance Act has been re-enacted with amendments. The title of the new law, which received the royal assent on 20 September, is "An Act respecting Insurance".

Among all its provisions we will notice only that which concerns insurance against hail. Every Canadian company insuring against hail is required to accumulate a hail insurance surplus fund equal to 50 per cent. of the premiums of the year by setting aside its profits from such business. British and foreign companies undertaking business of this kind must maintain assets in Canada in excess of the amount required in respect of their other business by at least 50 per cent of the total net premiums on their hail business in Canada.

GERMANY.

1. THE RESULTS OBTAINED BY THE MOST IMPORTANT MUTUAL SOCIETIES FOR INSURING LIVE STOCK IN 1916. — *Wallmanns Versicherungs-Zeitschrift*, 51st year, Vol. II, No. 93, Berlin-Lankwitz, 30 August 1917.

Apart from the *Perleberger*, which, has transformed itself into a stock company, the insurance of live stock is practised in Germany by mutual institutions. The figures with respect to them which we will give concern the twenty-five most important of their number, and among these the *Schlachtviehversicherung* (Insurance of Cattle for Slaughter) of Berlin and the two provincial institutions of Bavaria with the *Rheinische Pferde- und Viehversicherung* (Rhinish Horse and Cattle Insurance) come nearest to the *Perleberger*. If the Berlin *Schlachtviehversicherung*, two fifths of whose insurance is of butchers' live stock, be left on one side, we find that in 1916 the total insurance of these institutions was only 1,200,815,636 marks. If it be admitted that Germany's total live stock should be estimated at 25,000,000 heads, the amount of insurance still to be accomplished in this sphere becomes clear. It is true that side by side with these large so-

cieties there are thousands of small local societies, but the latter have too little importance.

The twenty-five societies covered by our figures received premiums including dues, amounting to 20,612,992 marks, from which sum 1,998,777 marks of reinsurance must be subtracted. The net total was therefore 18,614,222 marks.

In the following table receipts and expenditure are shown under their different heads in terms of thousands of marks, and the development of these insurance societies from 1911 to 1916 is thus made clear.

RECEIPTS.

	1911	1912	1913	1914	1915	1916
Premiums	18,663	18,633	18,754	18,653	17,494	20,612
Reinsurance	609	691	894	851	1,126	1,998
Mathematical reserves	194	127	82	86	174	82
Amount of premiums	17,860	17,815	17,788	17,888	16,542	17,777

EXPENDITURE

Indemnities	20,054	20,447	20,221	20,148	17,550	16,994
Sale of carcasses, etc.	5,224	5,487	5,691	5,493	4,468	4,122
Net amount of indemnities.	14,830	14,690	14,530	14,655	13,082	12,871
Costs and provisions	3,260	3,065	3,060	2,976	2,747	3,250
Balance	— 230	— 210	188	257	713	1,641
Interest	374	442	398	394	408	531
Difference of exchange.	— 17	— 75	— 68	— 31	— 58	— 61
Total balance	127	157	518	620	1,063	2,757

Indemnities amounted to 16,994,115 marks. From this sum 4,122,017 marks must be subtracted as emanating from the sale of carcasses and remains, and the net sum of indemnities was therefore 12,871,198 marks or 72.3 per cent. of net premiums. In the successive years from 1880 to 1916 the like percentage was: 68.6 — 70 — 74.1 — 72.1 — 71.1 — 71.1 — 76.8 — 72.6 — 71.4 — 73 — 71.4 — 70 — 73 — 74.4 — 79.7 — 78.6 — 79.6 — 82.4 — 79.8 — 80.7 — 82.5 — 83.4 — 83.5 — 83.9 — 82 — 82 — 79.1 — and 72.3.

Costs, taxes and commissions amounted to 3,257,460 marks or 18.3 per cent. of net premiums. Costs and indemnities absorbed the total amount of premiums to an extent which reduced profits to 1,643,306 marks. The latter sum was however considerable as compared with profits in previous years.

Year	Number of Societies	Insured sums outside the Schlachtviehver- sicherung of Berlin marks	Premiums and dues marks	Net amount of indemnities marks	Balance of amount of premiums marks
1883-1885	14	48,420,000	1,565,000	1,111,670	— 23,114
1886-1890	17	67,693,400	2,251,260	1,587,720	19,350
1891-1895	21	104,675,000	3,544,861	2,558,273	— 57,000
1896-1900	22	216,351,000	5,690,481	4,078,407	31,432
1901-1905	26	516,354,000	13,266,513	10,423,802	— 13,896
1906-1901	26	681,950,000	16,171,547	12,879,971	— 128,709
1911	26	817,257,000	17,860,650	14,829,790	— 229,968
1912	25	825,534,000	17,815,013	14,960,047	— 210,139
1913	25	833,533,000	17,791,359	14,530,465	182,723
1914	25	834,187,000	17,887,428	14,655,594	256,750
1915	25	799,567,054	16,542,313	13,081,971	712,897
1916	25	1,200,815,636	17,771,064	12,871,198	1,643,306

German societies insuring live stock	Premiums of each Society	Premiums and costs, profit from sale of carcasses deducted	Mathe- mat- ical reserves	Balance from		Mathe- mat- ical reserves	Sums insured including insurance of butchers' stock	Difference as compared with 1915
	marks	marks	marks	pre- miums	interest and various	marks	marks	marks
1. Altenburger, Altenburg	375,562	327,949	1,357	2,474	10,231	6,533	13,801,742	— 4,144,708
2. Allgemeine Deutsche Viehversicherung, Berlin	790,165	350,568	66,418	94,998	424	180,096	55,511,430	31,494,780
3. Central-Viehversicherung-Berlin	293,118	133,885	9,433	31,022	8,313	24,207	34,627,725	— 11,624,213
4. Veritas, Berlin	679,115	243,084	51,276	3,506	— 2,710	125,090	33,910,723	+ 13,696,255
5. Braunschweig, Brunswick	810,143	259,656	4,150	3,946	5,961	84,413	13,182,150	+ 509,481
6. Sachsen, Dresden	802,560	430,539	101,792	53,544	12,312	226,948	22,212,639	+ 6,234,403
7. Vaterländische, Dresden	402,644	189,373	46,596	66,711	48,494	193,075	10,115,448	+ 3,001,297
8. Erfurter, Erfurt (1)	380,932	230,969	—	95,386	34,427	229,817	13,765,025	+ 4,579,965
9. Halensia, Halle	740,758	270,808	55,867	131,763	3,210	131,272	107,910,478	+ 72,799,677
10. Norddeutsche, Hamburg	130,648	88,172	4,485	— 13,170	— 926	8,109	3,321,850	+ 59,480
11. Badische Pferde, Karlsruhe	733,132	398,123	62,741	123,659	33,427	328,376	17,390,391	+ 415,171
12. Rheinische Pfe-de-und Viehversicherung, Cologne	1,733,847	1,110,064	237,149	122,195	23,102	464,516	66,671,753	+ 27,286,955
13. Anhaltische, Cöthen	38,860	27,428	—	2,451	1,832	—	992,375	+ 86,315
14. Bayerische Pferdeversicherung, Munich	1,963,320	1,745,842	—	203,448 (4)	96,133	—	76,010,400	+ 12,850,640
15. Bayerische Rindviehversicherung, Munich (2)	1,542,650	1,311,950	—	201,010 (4)	150,791	—	164,887,357	+ 61,971,134
16. Felleberger, Peitzberg	2,408,817	1,633,426	85,803	111,669	33,077	153,841	475,342,061	+ 171,865,930
17. Viehversicherung zu Plan, Plan	180,856	131,517	8,127	— 13,888	— 3,027	12,571	3,736,115	— 3,338,219
18. Viehversicherung zu Schwerin, Schwerin	1,011,081	623,914	95,129	72,334	18,210	255,422	41,550,540	+ 2,919,671
19. Pfälzische, Speyer	165,577	91,369	10,745	24,483	7,153	43,593	5,844,526	+ 2,355,804
20. Stuttgarter Pferdeversicherung, Stuttgart	201,161	150,114	—	20,670	8,114	90,000	5,116,576	+ 470,910
21. Trierer, Treves	155,683	86,073	—	55,578	5,238	—	8,096,260	+ 838,234
22. Wehener, Weizen	1,124,689	860,830	—	48,486	10,512	—	20,002,091	+ 4,827,029
23. Frigolitzer, Wittenberg	81,982	54,268	1,182	5,149	1,705	1,541	1,990,300	+ 534,920
24. Zeitzer Versicherung, Zeitz	186,948	108,695	—	2,389	4,772	—	4,515,381	+ 1,495,810
25. Schachtviehversicherung, Berlin (3)	16,449,672	10,908,716	8,423,358	1,512,663	511,635	— 92,719	2,559,440 1,200,815,636	+ 308,868,901
	2,164,550	1,962,482	—	1,062,3	9,594	—	?	?

(1) 31. May 1916-1917. (2) 1st November 1915-1916. (3) Date in accordance with those for 1915. (4) Interest on State securities: Bayerische Pfand-
versicherung, 100,000 marks; Deutsche Rindviehversicherung, 146,000 marks.

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2. THE DAMAGE CAUSED BY FLOODS. — *Wallmann's Versicherungs Zeitschrift*, 51st year
No. 92, Vol. II. Berlin-Lankwitz, 26 August 1917.

The following figures are taken from the last Statistics as to the damage caused by the increase of waters and by floods in Prussia. They apply to the period 1903 to 1913.

Year	Amount of damage	
1903	44,139,380	marks
1904	2,204,372	"
1905	8,692,380	"
1906	5,411,799	"
1907	23,892,076	"
1908	9,247,488	"
1909	20,956,285	"
1910	13,882,347	"
1911	4,460,229	"
1912	6,906,090	"
1913	12,280,271	"

The greater part of this damage should be ascribed to the value of the crops, as follows :

Year	Area affected hectares	Amount of damage marks
1903	372,688	36,072,910
1904	18,332	1,029,806
1905	125,327	7,144,146
1906	61,429	4,083,140
1907	246,387	22,439,105
1908	86,371	8,315,214
1909	132,635	8,972,169
1910	195,537	10,693,299
1911	59,166	3,299,219
1912	116,408	5,748,747
1913	168,190	8,280,191

It is very important to be able to localize the amount of damage caused according to the watercourses and basins. But facts of this kind have been collected only for a few years, whereas it is seven years since statistics were first established without taking them into account. The following data are those which exist for the years from 1910 to 1913.

	1910 marks	1911 marks	Amount of damage. 1912 marks	1913 marks
Memel	—	—	105,701	144,118
Pregel	—	—	1,330,365	761,534
Weichsel	156,644	109,800	533,308	1,321,985
Oder	5,252,791	2,745,214	1,392,363	3,153,367
Elbe	2,109,965	235,726	574,884	190,472
Oste	—	25,270	—	8,510
Weser	1,073,335	103,411	826,438	511,599
Ems	299,722	—	87,281	57,945
Vechte	79,703	—	47,700	14,435
Rhine.	3,078,880	546,184	293,396	305,552
Meuse	55,685	4,203	335	3,970
Danube	67,540	—	4,040	—
Kurisches Haff	110,445	28,175	386,380	640,132
Frisches Haff	603,541	28,618	596,249	224,629
Ostsee	206,467	306,593	304,422	3,140,772
North Sea.	446,640	402,465	305,245	94,835
Binnenseen	340,989	24,380	117,983	57,455
Wolkenbrüche	—	—	—	1,648,961

UNITED STATES.

MUTUAL INSURANCE AGAINST FIRE IN MASSACHUSETTS.—*Sixty-Second Annual Report of the Insurance Commissioner of the Commonwealth of Massachusetts, January 1, 1917 (Business of 1916), Public Document No. 9.*

From about 1895 until 1897 the organization of mutual fire insurance companies in Massachusetts proceeded with feverish rapidity, more than twenty new companies of the sort being incorporated and authorized to issue policies. But of these ill founded and ill administered companies not one has survived until the present day.

This unfortunate episode led to the passing of three statutes, still in force, each of which is intended to prevent certain abuses. By the first any person whose duty it is to determine the character of risks and decide whether applications for insurance be accepted or rejected by an insurance company is forbidden to receive as part of his remuneration a commission on the premiums. The second law imposes a penalty on any Massachusetts fire insurance company which establishes an agent or appoints any person to seek or to transact for it business in any State in which it has not been lawfully authorized to transact business, or any such company which allows a commission or emolument to any person for thus soliciting or procuring insurance. The aim is to prevent unwary or grasping underwriters from burdening the companies of Massachusetts with the poor risks of other States. The third law enacts that no policy shall be issued

by a newly incorporated fire insurance company until it has filed with the Insurance Department a list of those subscribing for its insurance and such other information as the Insurance Commissioner may require, and until its president and secretary have certified on oath that every subscription on the list so filed is genuine, and have agreed with every subscriber that he will take the policies for which he has subscribed within thirty days of the time at which the Insurance Commissioner grants to the company a license to issue policies. This law has practically put an end to false subscription lists.

These laws prevented certain abuses but did not prevent a second although less grave crisis which occurred about 1915 because new mutual fire insurance companies were incompetently managed. The new companies in question were able to show that their proceedings for incorporation had been legally carried out, and that each of them had secured, as the statute requires, more than 400 applications for insurance within the Commonwealth, covering more than \$1,000,000 of insurance, and had not accepted any application bringing the value they insured beyond 10 per cent. of their net assets as defined by statute.

It became necessary to forbid the issue of a license to transact business to a new company until it had adopted a proper system of accounting, engaged a competent accountant and a competent and experienced underwriter, and freed itself from any liability incurred on its behalf. In the case of a stock company the liability for capital stock was however excepted from the prohibition.

The following table shows the condition of twenty-four of the oldest mutual fire insurance companies in Massachusetts — some of them were founded sixty, eighty or even a hundred years ago — in 1894, that is to say before the first crisis, and on 31 December 1916.

Name of company	Date of foundation	1894			1916			Gain or Loss in insurance			Gain or Loss in surplus		
		Insurance (net) in force	Surplus		Insurance (net) in force	Surplus		Gain or Loss in insurance			Gain or Loss in surplus		
		\$	\$		\$	\$		\$	\$	\$	\$	\$	\$
Abington	1857	8,272,505	19,294		11,623,160	124,238		3,350,655			104,964		
Attleborough	1845	2,053,976	20,959		2,090,480	13,383		36,484			7,576		
Berkshire	1835	8,759,550	53,122		22,782,178	102,629		14,031,628			49,507		
Cambridge	1834	15,622,520	93,692		5,708,953	18,287		9,913,867			75,105		
Citizens	1846	25,953,733	159,996		6,821,297	33,598		19,134,436			126,398		
Dedham	1837	4,499,597	91,069		9,486,915	110,748		4,987,318			19,679		
Dorchester	1855	30,218,280	115,451		19,999,774	58,495		10,218,506			56,956		
Fitchburg	1847	24,775,588	2,555		19,786,665	40,982		4,988,923			38,427		
Hampshire	1832	3,969,736	15,891		4,406,703	12,638		436,967			3,253		
Hingham	1846	27,385,599	178,366		27,594,236	148,711		208,637			29,655		
Holyoke	1843	39,336,085	564,640		46,475,182	500,841		7,139,997			63,799		
Lowell	1832	5,185,377	71,396		14,090,607	71,624		8,905,230			318		
Merchants and Farmers	1847	23,266,747	64,473		22,855,358	134,879		411,389			70,406		
Merimack	1858	29,175,873	56,131		36,764,322	66,307		7,588,449			10,176		
Middlesex	1826	36,732,516	296,535		45,429,718	252,274		8,697,202			44,251		
Mutual Fire	1827	4,820,923	120,492		6,271,500	251,761		1,450,577			131,269		
Mutual Protection	1864	1,405,733	57,256		4,200,461	56,231		2,884,728			1,025		
Newburyport	1859	696,835	25,789		820,435	45,031		123,600			19,262		
Norfolk	1825	19,708,931	327,125		27,268,989	483,665		7,470,058			156,540		
Quincy	1851	34,335,277	344,055		41,485,011	632,143		7,147,734			288,088		
Salem	1838	2,205,710	43,243		1,552,347	14,985		653,363			28,258		
South Danvers	1829	1,167,250	53,585		2,063,947	6,301		896,697			47,284		
Traders and Mechanics	1848	39,609,416	368,333		36,419,407	147,140		3,190,009			221,213		
Worcester	1855	39,010,914	388,258		38,927,600	667,116		83,314			278,85		
		428,251,671	3,531,626		455,012,1925	3,994,047		26,761,594			462,421		

These figures show that in the twenty-two years considered these companies have gained in net insurance in force \$26,761,294 and in surplus \$462,421, and are thus more than holding their own, with the new companies.

Some figures can be quoted to show the general position of insurance against fire in Massachusetts. The companies undertaking insurance of this kind received altogether premiums amounting to \$ 13,488,419 in 1907 — estimated dividends payable on the mutual companies' premiums being deducted — to \$ 20,036,210 in 1916, and to the aggregate sum of \$157,055,653 in the ten years from 1907 to 1916, inclusively. Indemnities paid in 1907 and 1916 amounted to \$ 7,729,583 and \$ 9,184,161 or 57.31 and 45.84 of premiums, respectively. The average percentage of premiums paid as indemnities in these ten years was 67.89, and was much raised by the large percentages paid in 1908 and 1914 — respectively 111.98 and 139.24 — in consequence of the importance and frequency of losses.

There were 264 companies which insured against fire in Massachusetts in 1916. They received altogether \$ 458,136,449 in net premiums and paid \$ 223,634,069 in net indemnities. They were distributed as follows :

1. Massachusetts mutual companies other than manufacturers' . . .	34
2. Massachusetts mutual marine insurance companies	1
3. Mutual companies of other States other than manufacturers' .	13
4. Massachusetts manufacturers' mutual companies	8
5. Manufacturers' mutual companies of other States	18
6. Massachusetts stock companies	4
7. Stock companies of other States	120
8. United States branches, companies of other countries	66
	<hr/>
	264

Mutual companies belonging to the first group received in 1916 net premiums amounting to \$ 3,033,801 and paid \$ 1,052,130 in net losses. Their admitted assets amounted to \$ 9,257,806 and their liabilities to \$ 3,931,228. Companies of the third group received net premiums amounting to \$10,685,750 and paid \$4,151,848 in net indemnities. Their admitted assets amounted to \$ 27,348,850 and their liabilities to \$ 16,457,495. The surplus of the first group amounted only to \$ 5,320,389, that of the third group to \$10,891,355.

The total number of fires in Massachusetts in 1916 was 7,101, and 1,855 of them occurred in the town of Boston. The total sum paid in indemnities in the whole State was \$ 8,188,149.53, in Boston \$ 2,250,587.26. There are no data to show the losses sustained by agricultural property in the year nor the share of agricultural insurance undertaken by the mutual companies of this State. It has been established however that outside Boston 250 fires occurred in barns and stables of which the estimated value as buildings was \$ 692,687 and the insured value \$ 441,397 : the loss was

valued at \$ 334,040 and \$ 227,468 was paid in indemnities. The contents of these buildings were estimated as worth \$ 437,792 and were insured for \$ 306,488: the loss under this head was \$222,006 while indemnities amounted to \$ 151,962. The causes of fires in barns and stables, including twenty-seven such fires in Boston, were distributed as follows: candle, lamp or stove igniting merchandize or other material, 6; careless smoking, 66; careless use of matches, 66; children with matches, 23; defective chimneys, 3; defective heating apparatus, 2; electrical causes, 5; fire-crackers, 3; friction, 1; ignition of gasoline or other volatile oils, 4; hot ashes in wooden receptacles, 5; incendiarism, 19; upsetting lantern, 7; lightning, 36; malicious mischief, 3; boiler in milk-room, 1; overheated heating apparatus, 1; rats and matches, 2; sparks from bonfires, heath or forest fires, 7; sparks from chimneys, 6; sparks from locomotives, 5; sparks from matches or snap matches, 2; sparks from stoves, 2; spontaneous combustion, 34; thawing water-pipes, 5; tramps, 10; unknown, 64.

Part III: Credit

SPAIN.

THE ORGANIZATION OF AGRICULTURAL CREDIT BY THE FORMATION OF A CENTRAL FUND.

OFFICIAL SOURCES:

REAL DECRETO RELATIVO A LA CREACIÓN DE UNA CAJA CENTRAL DE CREDITO AGRÍCOLA (Royal Decree relative to the Creation of a Central Fund of Agricultural Credit). *Gaceta de Madrid*, No. 196, Madrid, 15 July 1917.

OTHER SOURCES (1):

EZA (Visconde de) El problema agrario in España (*The Agrarian Problem in Spain*) Impr. Bernardo Rodriguez, Madrid, 1915.

THE SPANISH AGRICULTURAL AND ECONOMIC PRESS.

§ I. PRELIMINARIES.

"Our agricultural masses, who form the first step in our scale of production and are necessary to all further production, ask for the circulating capital necessary to all the completing and improving measures of which they have heard for years as means of redemption. In order to procure manures, to secure the use of modern agricultural machinery, to buy animals for breeding, such an expenditure of funds as is impossible to a modest farmer is necessary; and therefore we think it essential to supply such a small farmer, at once owner of some fields and lessee of others — a double capacity which allows him with difficulty to earn a meagre livelihood for his family — with that equipment for his struggle which is in the twentieth century indispensable". The Spanish Minister of *Fomento*, the Visconde de Eza, expressed himself thus in introducing the decree of 21 July 1917.

(1) For the general bibliography of agricultural credit in Spain the articles "L'organisation agricole en Espagne" and "Les problèmes du crédit foncier rural et le Banco Hipotecario de España", published respectively in our issues (*Bulletin Mensuel des Institutions Économiques et Sociales*) for February and July 1912, should be consulted.

The multiplication of facilities for credit in country districts has indeed been for long one of the most important problems of Spanish agriculture and therefore of the national economy. We need not go back to the distant time of the creation of the *pósitos* (1), which at their origin were essentially benevolent institutions, to find the problem of agricultural credit in Spain in the forefront. It was so towards the middle of last century, as a consequence of the loss of the vast Spanish colonial empire and at a time when modern methods of agriculture were generalized. As early as 1841 an ordinance of the regent of the kingdom tended to create *Banks of Agriculturists*, formed with the help of private capital or the available funds of the *pósitos*, to make loans to inhabitants of the rural groups. The parliamentary chronicles notice in 1866 a scheme for a law proposed by Señor Montero Rios on "institutions of agricultural credit and their transactions". In 1899 Señor Gamaza proposed a law based on the reorganization of the *pósitos*. In 1900 a minister, Señor Sanchez de Toca, brought forward a scheme for a law on "agricultural credit for the cultivation and ownership of land" which implied the constitution of local intermediary societies. Finally in 1910, 1912 and 1915 Señors Calbeton, Zulueta and Alba respectively formulated schemes, the first named for an "institution of agricultural credit" based on the *pósitos* and using their capital, the others for an official "agricultural bank". None of these schemes became law, mainly for political reasons.

Public authority for its part attempted to meet the need with all the means of which it disposed, while the general and complete solution of the problem was being attempted. With this object there was promulgated in January 1906 a law which created a royal commission, charged to liquidate the credit of the *pósitos* and to realize their assets in specie, in order to satisfy the needs of modern agriculture more easily (2). Since this liquidation had been largely completed, and since the government saw that while some *pósitos* could not, for lack of capital, satisfy the demand for loans, others, for lack of borrowers, left almost all or a large part of their funds unproductive, the royal decree of 16 October 1914 was promulgated. This decree authorized the constitution of federations of *pósitos*, in order completely to mobilize their capital and extend their sphere of action. The federations were granted the option, if they included *pósitos* disposing of capital, of making loans to agricultural associations. Unfortunately although these provisions were usefully applied in certain districts, they did not in general give the results expected of them, a fact largely due to the defective management of many *pósitos* and the manoeuvres of *caciquismo* which is still dominant in most rural districts of Spain (3).

(1) For these communal granaries, which resemble the Italian *Monti frumentari* and the Portuguese *Celleiros*, see our issues for June 1914 (page 72) and December 1915 (page 67).

(2) See the articles mentioned in the preceding note.

(3) *Cacique*, a word of American origin, denotes anyone who by his position or adhesion to a political party is morally master of one or more local groups and to whom most members of the latter are under obligations. Since *pósitos* long constituted an arm of *caciquismo*, the sus-

At present a Spanish farmer can nominally obtain the credit he needs, outside some establishments having more or less local importance, from the following institutions : the *pósitos*, the Bank of Spain, the Mortgage Bank, the Bank Leo XIII, and the rural funds. We say nominally because, in consequence of the faulty management of which we have spoken, the *pósitos* are far from supplying the needs of the peasants ; the Bank of Spain, in spite of goodwill and government encouragement (1) has not the organization and elasticity necessary to transactions in agricultural credit ; the Mortgage Bank, although specially founded to help agriculture, is active, almost exclusively, in urban spheres ; the Bank Leo XIII, while by its loans to agricultural syndicates it accomplishes really useful and practical work, has its sphere necessarily limited by its connection with the Church and suffers all the consequent inconveniences ; and finally the rural funds, except in a very small number of districts like Extremadura and Navarre (2) for lack of resources only vegetate miserably.

To resume : in no country as much as in Spain is capital withdrawn from the country districts, including capital formed there and emanating therefrom, and does it so tend to be invested securely in State funds rather than to find any investment where interest depends on the work and intelligence of those administering it. The farmer on the other hand cannot obtain credit directly from the large urban establishments which in Spain absorb public savings, for these do not know him and do not accept his signature. It follows that it is necessary to create an organism which will be able to procure funds where money is concentrated, placing it at the disposal of peasants to be employed productively. This necessity forms the basis of the *Central Fund of Agricultural Credit* at which the decree which we will examine aims.

§ 2. THE ROYAL DECREE OF 12 JULY 1917.

Under the modest title of " decree relative to the creation of a central fund of agricultural credit " the royal decree of the 12th of July of this year covers the whole problem of agricultural credit and establishes the bases of an organization which will allow of its solution. The measure does not confine itself to setting up an official establishment responsible for supplying money to agriculture. It at the same time defines and regulates the reciprocal relations of the farmers grouped in associations and offering in the collective liability of all their members a sufficient guarantee to lending institutions, and also the relations of these associations with the Central

picion with which they are still regarded by peasants, in spite of the very considerable services they once rendered to agriculture, is easily understood. For *caciquismo* in the Spanish country see *Bulletin des Institutions Economiques et Sociales* for July 1912, page 123.

(1) See our issue for November 1915, pages 33 and 34.

(2) See our issue for March 1915, pages 10 to 27.

Fund formed to act as intermediary between them and the credit establishments.

The object of the decree, as specified in Article I, is to promote in Spain the employment of capital for the improvement of agricultural production and stock farming by stimulating the formation of agencies for supplying the materials and machinery needed by the technique of modern agriculture, and by endowing these agencies with the necessary pecuniary resources. With this object, says the decree, the State will endeavour to develop the spirit of association as well as the associations themselves, forwarding that educational activity which causes the need for them to be born and felt, indicating which forms of them are most suitable with the help of all official or private organizations already in being, exercising by means of advice a directive influence over such as are constituted, seeing that they command the capital necessary to their life and development, and taking steps to obtain from banking and commercial companies that they collaborate by employing all their available funds on the work of expanding the agricultural associations. Such are the social functions entrusted to the new Central Fund.

To resume, the terms of the decree may be summarized in the following points which show the basis on which an institution of agricultural credit is to be set up in Spain : *a*) the creation of an official central agency which will dispose of contributions furnished by the privileged and free banks and the State, and will seek to invest in the country districts the money forming the savings deposits of establishments belonging to the urban banks, and to forward rural association as a basis of credit ; *b*) the constitution and regulation of agricultural associations ; *c*) the determination of transactions in agricultural credit ; and *d*) the preservation and modernizing of the *pósitos* by completing their liquidation and adapting their methods to the needs of modern agriculture and of the bank.

I. The Central Fund of Agricultural Credit and its Business.

The constitution and working of the Central Fund of Agricultural Credit formed by the decree in question imply no original idea for, as the preamble to the decree expressly indicates, the provisions governing the Fund have been borrowed indiscriminately from all central banks and from like organizations in many countries, particularly Poland, Germany, Italy and Rumania. However in view of this catholicity, and of the adaptations which have taken place to suit both the necessities and the possibilities of Spanish agriculture, a short examination of the organization and the business of the establishment which has been created will not be without interest.

In addition to the functions we have mentioned, aimed at encouraging and multiplying agricultural associations by moral and pecuniary support and by a supervision which will ensure their normal development, and at intensifying the financial relations between these associations and banking organizations by advancing the investment of the funds of the latter in combinations for agricultural credit, the principal transactions of the Central Fund will be as follows :

a) to endorse bills or become answerable for payments when operations are effected with or loans made to agricultural societies, in determined cases and conditions ;

b) to procure that agricultural associations group themselves in provincial or district federations, thus uniting the individual or collective savings of their territorial spheres for local productive use, and thus procuring needed funds for certain associations, and for others an investment for excess funds, or in other words enabling available funds to circulate ;

c) to receive interest-bearing deposits from these associations or federations by assigning funds to the business of making loans (the district federations or funds will, where they exist, form the link between the Central and the local funds, and the form of and security for business of the kind will be established with this end in view) ;

d) to receive from the public deposits on current account, deposits withdrawable by cheque, and savings deposits, always using these funds exclusively for the business of agricultural credit, in accordance with the functions entrusted to the Central Fund ;

e) to open current credit accounts with the *pósitos*, the rural funds, the syndicates and the federations and other agricultural organizations, on the personal, collective and unlimited guarantee of the members where the latter organizations are concerned or the real guarantee of their capital in the case of the *pósitos* ;

f) to grant to the agricultural institutions already mentioned loans amortizable in one or more payments. These loans could be granted on the collective and unlimited guarantee of the members, or on the products of agriculture or stock farming or their derivatives, on draught animals, agricultural machinery, standing or stored crops or other like pledges which would remain in the hands of the borrower, in accordance with a special regulation to be published ;

g) to grant loans also to farmers on any of the guarantees enumerated in paragraph f), or to open for them credit accounts like those mentioned in paragraph e), either on the direct and exclusive guarantee of those interested or with the subsidiary guarantee of a syndicate. These loans will not exceed a maximum of 20,000 pesetas (1) and cannot be made for a longer term than three years ;

h) to issue, in virtue of the operations already enumerated and up to the amount of the sums lent or invested, *agricultural bonds* or other bonds, repayable within a determined period or by drawing lots. Premiums, payable at the time of repayment, may be granted to these bonds. The total sum of the agricultural bonds in circulation will not exceed the amount of loans, as that of the special bonds will not exceed that of the operations they represent ;

i) to negotiate the securities already mentioned and grant loans on them. Those operations are excluded which the Central Fund may conclude in issuing the securities in question and which are guaranteed by

(1) 1 peseta = about 9 $\frac{3}{8}$ d. at par.

landed property. The Central Fund may lend funds to other agricultural institutions, even if these undertake business of this kind, but may not in such case issue bonds for a sum in excess of that part of the loan which these institutions guarantee exclusively in the form indicated in paragraphs e), f) and g).

The most important of the functions of the Central Fund which aim at intensifying the contact between banking establishments and agricultural associations is indubitably the influence it should exercise on the relations between the syndicates and the rural funds and the Bank of Spain, which is the official issuing establishment. The Central Fund of Agricultural Credit may foster these relations in two ways, namely :

1) The syndicates will determine what sums they need for their operations and prepare a list distributing these according to the amount demanded by each member. This work once accomplished, and the guarantee of the solvency of each syndicate having been fitly established, each syndicate will draw on each of its members an order for the sum granted to him, and when this bill has been accepted by the Central Fund the syndicate, having endorsed it, will discount it at the Bank of Spain, thus rapidly and easily obtaining the funds necessary to its business. The bank should for its part obviate two inconveniences. One consists in presenting the note at the home of the member on the day on which it falls due, and can be avoided by appointing as the place of payment the headquarters of the agricultural syndicate or the capital town of the province. The other consists in the costs of a renewal. This operation may by the care of the syndicate be effected at the competent branch of the bank without troubling the member. The costs in question will then be taken into account in the bonus which the bank will allot to the syndicates for their intervention in these operations.

2) The bank will open for the district funds depending on the Central Fund a credit account, guaranteed by the commercial bills which the syndicates will remit to these funds and on which the bank will advance sums to the funds in question for their operations. Thus each syndicate, after having brought together and classified the individual demands of its members, will subscribe a bill or note to the district fund for the total amount of the loans demanded by its members. The Central Fund will take all necessary precautions to ensure the good working and the perfect solvency of the syndicate in question ; and if its decision is favourable it will endorse the bill, already signed by the syndicate, to the Bank of Spain which will discount it if it is for a short term, or accept it as guarantee of the aforesaid credit if it falls due in a longer term than three months, but not if this term is longer than the nine or twelve months which cover the cycle of agricultural operations.

The Central Fund of Agricultural Credit will be constituted with an initial capital of 10,000,000 pesetas in shares of 500 pesetas each, of which half must be paid up when the fund becomes active. This capital will be subscribed as follows : 2,000,000 pesetas by the *pósitos*, deducted from the

unproductive funds placed at their disposal by the Royal Delegation (1) and 2,000,000 pesetas by the Bank of Spain. The last 2,000,000 pesetas of shares will be at the disposal of the ordinary banks and agricultural associations of a general character, which must subscribe at least 100,000 pesetas each in order to form part of the directing committee. If a sum remain available the Mortgage Bank of Spain will be authorized to subscribe shares for its amount.

The Central Fund in question will have the character of a co-operative association for it will do business only in the interest of agricultural associations and with them exclusively. With this end in view capital will bear a fixed interest which may not exceed a total of 6 per cent. This interest once paid, any remaining profits will be divided as follows: 50 per cent. to constitute a reserve fund and 50 per cent. to the syndicates *pro rata* of their operations with the Central Fund. From the time when the reserve fund becomes equal to half the subscribed capital only 10 per cent. of profits will be paid into it compulsorily.

The Central Fund will constitute a legal person and act quite independently in all its business. It will be administered by a directing council, comprising a chairman freely nominated by the government whose post will be permanent (2), a representative of the *pósitos*, a representative of the Bank of Spain and one of the Mortgage Bank, all three freely chosen by these establishments, and a delegate of each of the following bodies which has subscribed a minimum of 100,000 pesetas — General Association of Stock Farmers, Association of Agriculturists of Spain, Catalan Agricultural Institute of San Isidro, Bank-*Leo XIII*, and Association of Cultivators of *Saragossa*. Every other association, being strictly co-operative and agricultural and general in character and subscribing the aforesaid minimum, can have a delegate in the council.

The Ministers of Finance and of *Fomento* will exercise supervisory functions over the Central Fund. The former will have the higher supervision of its economic activity which he will determine, and the latter will be concerned with the whole work of agricultural organization incumbent on the Central Fund in virtue of the objects for which it is instituted.

The directing committee will fix the bases of the rates of interest, the terms granted for repayment and the security on which the Central Fund will make loans.

All documents and books, bills payable on order, and discount or credit books and bills which the agricultural associations issue in the course of their relations with the Central Fund will be exempt from the stamp duty.

The Central Fund of Agricultural Credit keeps for five years, as the decree instituting it expressly states, an experimental character. After

(1) See our issue, already cited, for March 1915, pages 10 et seq.

(2) By royal decree Count de Montornes, delegate of Spain to the general meeting of the International Institute of Agriculture, has been nominated chairman of the Central Fund of Agricultural Credit.

this period the system defining the exercise of agricultural credit in Spain will be submitted to parliament, the lessons of experience being duly taken into account.

II. *Definition of Agricultural Associations. The System.*

Agricultural credit having been organized as stated, it became necessary to multiply in the Spanish country districts the rural associations which form its basis, and to encourage their creation where they do not yet exist. The possibility of obtaining capital at a low rate and on good terms is in itself a sufficient stimulus to the constitution of intermediary associations; but it was further indispensable to eliminate as far as possible obstacles of an administrative kind which might in any way impede the movement towards association.

Owing to lack of precision in the law of 1887 on associations and the law of 1906 on agricultural syndicates (1), organizations having a political, commercial or other character, and having nothing in common with the institutions in favour of which these measures were framed, often shared the advantages provided by legislation. Therein lies the justification of the extreme severity evinced by the competent administrative agencies in examining the by-laws and rules of the societies which asked to be registered in conformity with the aforesaid laws. The necessity of possessing sufficient information to enable registration to be granted or refused caused, in most cases, instructions with respect to the applications for constitution, which new rural organizations presented, to be issued very slowly. Moreover in some doubtful cases the administration showed some narrowness of judgement, a circumstance which was not surprising since the advantages of registration consisted ultimately in certain fiscal exemptions.

To eliminate these obstacles it was necessary to satisfy a long-standing demand of the Spanish rural class, that is clearly and sharply to define agricultural co-operation and association, determining how they should be active in forms which would serve as models to future agricultural associations constituted according to the laws already cited, and which would serve as a basis on which the public administration could rapidly meet demands for constitution. To this necessity the definitions of chapter II of the decree respond, definitions which, we should state, were established by the International Committee of Agriculture at its meeting of 1912 (2).

According to these provisions agricultural association is "the agreement by which two or more persons permanently pool their knowledge, activity or economic resources to study or protect, create or improve means for advancing the progress of agriculture and the improvement of the economic or social condition of the parties to the agreement, by adopting the principles of co-operation".

(1) See the paper on co-operation in Spanish agriculture in our issues for March and May 1915.

(2) See *El Problema agrario en España* by Visconde de Eza. Madrid, impr. Bernardo Rodríguez, 1915, pp. 197.

The co-operative associations contemplated by the decree may be for consumption or production or for affording credit, or they may have mixed objects.

The co-operative credit societies, which are most interesting as regards the circulation of capital in the country districts, may have limited or unlimited liability or be mixed in form. Their business will include discounting advances, loans, and the acceptance of remittances or deposits, and will be transacted only with their own members or other agricultural co-operative societies. Thus all rural co-operative societies, whether credit societies or other, can equally profit by the advantages of the decree as to obtaining capital. The co-operative credit societies can borrow from persons outside their association, receive their deposits and discount their bills, but with the sole object of effecting these operations with their own members or increasing their circulating funds. The distribution of profits will take place — be it noted — among members, in proportion to the sums they have paid to the association as interest on operations effected with it, and it will be in the form of a rebatement of interest.

The agricultural co-operative associations defined by the decree considered will be subject, as regards their constitution and working, to the law of 1887 on associations and the law of 1906 on agricultural syndicates, and will enjoy the benefits granted by the latter law.

§ 2. THE OPINION OF THE AGRICULTURAL AND ECONOMIC WORLD ON THE CENTRAL CREDIT FUND.

Before we end this short study of the new organization of agricultural credit in Spain we will, to facilitate the reader's estimate of its fitness to the agricultural and social situation of the country, shortly notice some commentaries on it published in the technical press. We will analyse them objectively, relying on the considerations we have explained. Repeated allusion to these criticisms has on occasion been made by the minister who was author of the innovation when he has brought it before the public.

The independent agricultural press, beginning with a widely circulated periodical, *La Lega agraria*, does not stint its praise of the new decree. The paper mentioned even writes of the Central Fund that it sees "a wave of riches pass to the country districts at the mere appearance of this redeeming institution" (1). But at the same time another section of the press, which reflects the opinion only of industrial and banking circles, is less favourable to the organization set up to supply credit to agriculturists. One of the most important organs having this tendency is the weekly *España Económica y Financiera*. We think it pertinent to our end to examine this

(1) "El país agrícola de enhorabuena", *La Liga Agraria*, No. 1314, Madrid, 20 July 1917.

paper's (1) objections and oppose them with purely agricultural opinion and ministerial arguments.

The first objection to the decree is that the State intervention on which it is based is not pertinent to the solution of the problem.

To justify the government's agrarian policy in this case we will reproduce a passage from the explanation of the reasons for the decree in question. The minister expresses himself as follows: "In the Spanish rural class it is impossible to insist on certain conditions of preparation where banking and production are concerned. The conflict which is always pending between State intervention and free initiative must be decided, where national agriculture is concerned, by proclaiming that it is the State's duty to stimulate and favour the movement of capital towards the country and to awaken in farmers sentiments which will enable them to learn, to develop and to reach a position in which their signature will have a market value. On the intensification of this movement depends the very existence of the nation. A typical case is present for State intervention". We should add that the rural classes have, owing to the lack of private initiative never ceased to ask for this intervention.

A second objection is that before creating a central organ, set over the local organs, it is necessary that the latter should exist and be multiplied throughout the country. The Central Fund cannot create the local organs contemplated, for the Spanish character, especially the character of the peasants, is not only indifferent but also definitely opposed to association. This is what is said in financial circles, but the truly agricultural circles answer that this second objection is itself an argument which refutes the first and justifies the State intervention thereby criticized. The *Liga agraria* says in this connection, "Does not the spirit of solidarity exist among us? The Central Fund was created for this educative task. Will not all the loans be co-operative? This condition alone ensures its existence. To affirm the contrary is to disregard the inclinations of the race when it is well directed. You say that this spirit cannot lead far. To lose this fear you need only look at the marvellous co-operative and social movement which has already reached the smallest village (2)".

(1) See "La Caja Central de Crédito agrícola" in *España Económica y Financiera*, No. 117, Madrid, 28 July 1917.

(2) According to the official data of the Ministry of *Fomento* in 1914 the following organizations aiming at encouraging the development of agriculture were then active:

Chambers of agriculture	106
Communities of agriculturists	100
Agricultural federations and agricultural associations	660
Agricultural syndicates	1,530
Rural savings and loan funds	517
Economic societies	46

2,959

For the movement towards association and co-operation from the general point of view of agriculture see the article already cited on co-operation in Spanish agriculture.

Another criticism put forward is perhaps that one which would have most weight with regard to the improvement of the farmer's economic position. It is as follows. The Spanish farmer needs money for sowing and paying for necessary work and for his livelihood until his harvest is gathered. When once he has obtained this money he is preoccupied by the necessity of paying it back, and as soon as his crops are ripe he is in a hurry to harvest and sell them. In other words he sells immediately after the harvest when everyone in the same situation as himself is also selling his produce, that is when prices are lowest, and he leaves to others the profit of the rise in prices which always occurs a few months later. How then is it possible that a perfect organization of agricultural credit should not take these facts into account?

To these arguments the public authority answers that the establishment of warehouses for the products of agriculture and stock farming, to which the preceding objection implicitly alludes, is a co-operative function, and that, like the purchase of the materials of agriculture in large quantities and the sale on commission of country produce, it cannot be organized so that it fulfils its object except by means of central federations and local co-operative societies. The latter must organize — and the State must help them — the large groupings which will embrace the whole movement of agricultural co-operation. The contrary course would be to create a great commercial company in the form of an agricultural fund or bank. As to the fact that warehouses exercise credit in that they can grant loans on the security of deposited products, their working demands an exclusive and special organization with which no organization of personal credit, such as the Credit Fund under consideration, should be mixed (1).

As regards the role of intermediary entrusted to the Central Fund, the form established by the decree is approved, for general opinion recognizes that in Spain contact must first be established between privileged or free banks and the large agricultural associations which know the district and smaller local societies and can introduce them to the banks. Thus the machinery will be complete, and the organ created will be able to act independently and to use for the accomplishment of its task a network of associations as serried as it is vast.

The participation of the *pósitos* in this new organization has also been favourably received. In rural circles there is a conviction that these establishments could not be suppressed, in spite of the ills which have affected them in the last two centuries. In order that they may again render the services which were once their distinction it is only necessary, according to the most generally received opinion, to complete the liquidation of their property and their credit, and then to modernize their functions and entrust their administration to independent persons, technically competent. But until this transformation is effected, and in order to prepare

(1) See in this connection the *Boletín de la Asociación de Agricultores de España* for October 1916, pages 283 et seq.

for it, it is just that the *pósitos*, with a part of the capital of which they now have not the use, collaborate in the modern organization of the credit entrusted to the Central Fund. They will thus enter into a movement which will rapidly lead them to that transformation on which the usefulness of their existence depends.

To resume : the organization of agricultural credit in Spain, as established by the royal decree of 12 January 1917, has made a favourable impression in the economic and agricultural circles of the country, with the exception of a small section of opinion in banking and industrial circles. It can therefore be affirmed that this organization is very well adapted to the sentiment of agricultural society. Only the results which will be obtained in practice can tell us if the agency which this decree has formed is fitted to its object and in what measure it is so. This is the reason that the minister who is its author has left an experimental character to the Central Fund of Agricultural Credit, in order later to give it a definite form when the modifications which experience shows to be necessary have been introduced into it. Already however it is possible to affirm that the organization which is the object of the decree meets an inevitable need of Spanish agriculture, that of supplying farmers having modest resources with the capital they require. Therefore it is permissible to hope that it will not be necessary to wait long for the happy consequences of so important a measure.

ITALY.

THE ACTIVITY OF INSTITUTIONS OF LAND CREDIT IN 1916.

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- ISTITUTO DELLE OPERE PIE DI SAN PAOLO IN TORINO (*Institution of the Works of Charity of St. Paul in Turin*). Complete account of the year 1916. Credito Fondiario, Turin, 1917.
- MONTE DEI PASCHI DI SIENA. Complete account of the year 1916. Sienna, 1917.
- REPORTS FOR 1916 OF THE OTHER INSTITUTIONS OF LAND CREDIT ACTIVE IN THE KINGDOM.

§ I. THE ORGANIZATION OF LAND CREDIT.

Land credit is afforded in Italy by the following State-regulated institutions — the *Istituto Italiano di Credito Fondiario* at Rome, the *Istituto delle Opere Pie di San Paolo* at Turin, the *Monte dei Paschi* at Siena, the *Credito Fondiario Sardo* at Cagliari, and the savings-banks of Milan, Bologna and Verona.

A royal decree can authorize other bodies to practise this form of credit, in particular mutual associations of landowners possessing real estate of a value not less than 5,000,000 liras (1), societies and institutions having a paid-up capital of 10,000,000 liras, and those having a capital between this sum and 2,000,000 liras, in districts in which there is no local body affording land credit.

The land credit business of the savings-banks of Milan and Bologna, of the *Istituto delle Opere pie di San Paolo*, of the *Monte dei Paschi* and of the *Istituto di Credito Fondiario* may be undertaken in all the provinces of the kingdom. The savings-bank of Verona is authorized to afford credit in the Venetian provinces and the province of Mantua, the *Credito Fondiario Sardo* in the island of Sardinia.

The business which these institution may undertake is regulated by minute legal provisions and is various. It consists principally in granting

(1) 1 lira = 9 3/5 d at par.

loans on first mortgages on real estate up to half the value of the latter. Such loans are repayable gradually by annual instalments, within a period not less than ten or more than fifty years. The annual instalment includes the amortization quota, interest, the tax on income, commission and expenses of administration, and the quota of the sum repaid which is due as the tax to the Treasury, the latter being paid directly by the various institutions on behalf of those who borrow from them. The debtor can however free himself in advance of all or part of the debt, making the payments we have mentioned to the lending institution and the Treasury.

The institutions of land credit are further able to acquire, by cession or substitution on the same conditions as the loans, mortgage or privileged credit, the debts being repayable by amortization.

They procure the necessary means for operations of these two kinds by issuing land bonds bearing interest at the various rates of $3\frac{1}{2}$, $3\frac{3}{4}$, 4 , $4\frac{1}{2}$ and 5 per cent., thus avoiding the great oscillations of the financial market. Loans are made in bonds at a rate of interest equal to that of the bonds issued for the purpose of making them. These bonds have a nominal value of 500 liras and can be payable to bearer or nominative. They are gradually redeemed at par, that number of them being withdrawn every half-year which corresponds to the amount of the amortization due by the borrowers in the preceding half. The total land bonds issued are secured by the total mortgages held, the holders being thus safeguarded.

Landowners in no immediate need of capital but only of ready money can, before they apply for the loans regularly made in the form of bonds, obtain that a current account, secured by a mortgage, be opened for them, and that advances in cash be made to them on this account, at a varying rate of interest determined by the institutions.

We will now briefly examine the work which these institutions of land credit accomplished in Italy in 1916.

§ 2. THE " ISTITUTO ITALIANO DI CREDITO FONDIARIO "

This Italian Institute of Land Credit (1) was constituted in Rome on 7 February 1891, having by its by-laws a capital of 100,000,000 liras of which 40,000,000 liras were paid up.

In its report on the results of last year's business the administrative council shows that in spite of the difficult times the course of affairs was satisfactory.

In 1916 applications to the institute for loans numbered 183 and covered 21,254,500 liras, as against 71 applications for 5,992,000 liras in 1915. Thus applications increased by 112 and were for an amount which had increased by 15,262,500 liras. The increase would have been larger " if the institute

(1) See in this connection the interesting monograph "L'opera dell'Istituto Italiano di Credito Fondiario nei 23 anni dal 1891 al 1915". Report of the director general to the council of administration, Rome, 1916.

had not, in its desire to devote itself preferably to improving rural property, limited its acceptance of applications for loans on urban lands ”.

Contracts for loans definitely concluded in 1916 numbered 93 and were for 7,374,000 liras, while in 1915 they numbered 74 and were for 6,389,500 liras. They might have been represented by a far higher figure “ if they had been concluded proportionately to the remarkable growth in 1916 of the demand for paper as compared with the circulating funds on the market ”.

The amount of the loans concluded had to remain far below that of the resources of which the institute disposed, because the number of applications in the case of which enquiries could be prosecuted was limited. The abundance of money, the calls to arms, and the uncertainty involved in undertaking in present circumstances engagements binding in the far future, were the chief causes of this phenomenon.

Loans contracted for, as mentioned, in 1916 are guaranteed by securities of the value of 16,693,492 liras, and are distributed as follows according to the nature of such security.

	Number	Amount — Liras	Value of Security — Liras
Loans on rural properties . .	63	5,251,500	10,076,192
“ “ urban “ . .	30	2,122,500	6,617,300
Total . . .	93	7,374,000	16,693,492

The loans are distributed as follows geographically :

	Number of loans	Amount — Lira
North Italy	5	263,000
Central Italy	35	3,289,500
South Italy (including the islands)	53	3,821,500
Total . . .	93	7,374,000

They can be classified as follows in accordance with the sums lent :

	Number	Liras
up to 20,000 liras	28	371,000
from 20,500 to 50,000 liras	17	571,000
from 50,500 to 100,000 liras	24	1,885,000
from 100,000 to 500,000 liras	24	4,547,000
Total . . .	93	7,374,000

Out of the total loans contracted for in 1916 the sums assigned to the extinction of the more burdensome mortgage liabilities of earlier date and the emancipation from burdens amounted to more than two and a half millions, as follows:

For the extinction of mortgage liabilities.	2,666,278.58	liras
For emancipation from burdens	4,728.00	"
Total	2,671,006.58	

The mortgage liabilities discharged with the loans were subject to various rates of interest: 1,121,817.83 liras to 5 per cent. or less; 1,438,460.75 liras to from 5 to 6 per cent.; 106,000,000 liras to from 6 $\frac{1}{2}$ to 7 per cent.

From 1891 to 1916 the loans granted numbered 3,494 and were for 283,970,050 liras. On 31 December current credit amounted altogether to 188,305,247 liras.

The position of the institute on 1 January 1917 was as follows: capital in shares 40,000,000 liras; reserve as by by-laws 2,521,218.25 liras; available reserve 1,316,373.85 liras; reserve for oscillations of values 130,395.23 liras; deferred reserve 3,989,055.21 liras; profits remaining from 1916 — 18,612.18 liras; total 47,975,654.72 liras.

§ 3. THE LAND CREDIT OF THE SAVINGS BANKS OF MILAN, BOLOGNA AND VERONA.

As appears in the last report of the *Credito fondiario della Cassa di risparmio delle province lombarde* new loans in 1916 were somewhat limited in number and had increased only slightly since the previous year. This is to be attributed "exclusively to the conditions of the financial market, the fall in the price of land paper impeding the stipulation of new loans while it favoured the advanced repayment of capital".

The loans stipulated in the year numbered 197 and were for 12,947,500 liras, the increase since 1915 being in number one of nine and in amount one of 2,047,500 liras. Anticipated repayments in paper amounted to 3,540,000 liras in 1915 and to 6,567,500 liras in 1916.

Fifty-two loans for 5,136,000 liras were granted on the security of rural properties; 140 for 7,586,500 liras on that of urban properties; and five for 225,000 liras on that of property partly rural and partly urban.

Among the provinces which received most credit on the security of rural property, Pavia obtained two loans for 1,125,000 liras; Milan seven loans for 1,048,000 liras; Parma one for 460,000 liras; and Cremona three for 446,000 liras.

More than half the loans were of sums between 1000 and 50,000 liras.

On 31 December 1916 there were in circulation 2,878 bills of the 5 per cent. series; 90,404 of the 4 per cent. series; and 327,845 of the 3 $\frac{1}{2}$ per cent. series. Their total amount was 210,563,500 liras.

The *Credito fondiario della Cassa di risparmio di Bologna* stipulated 68

loans for 3,115,500 liras in 1916. Of these loans 46 for 1,670,500 liras were secured by urban lands, 21 for 1,295,000 liras by rural lands, and one for 150,000 liras by a property partly rural and partly urban. Four loans varied in amount between 500 and 5,000 liras, nine between 5,000 and 10,000 liras, eleven between 10,000 and 20,000 liras, fourteen between 20,000 and 30,000 liras.

The province of Bologna received most credit, namely 61 loans for 2,860,500 liras.

From the time this savings-bank was founded in 1868 until the end of 1916 there were stipulated 3,451 loans for a sum of 133,921,500 liras, the average amount of a loan being 38,806 liras.

The *Credito fondiario della Cassa di risparmio della città di Verona* granted in 1916 fourteen loans amounting altogether to 513,500 liras.

§ 4. THE " ISTITUTO DELLE OPERE PIE DI SAN PAOLO " AT TURIN, THE " MONTE DEI PASCHI " AT SIENA AND THE " CREDITO FONDIARIO SARDO " AT CAGLIARI.

The loans stipulated in 1916 by the land credit of the *Istituto delle Opere Pie di San Paolo* at Turin numbered 118 and were for 5,752,500 liras. They were distributed as follows :

on urban lands .	99	loans for	4,312,000	liras secured by mortgages of	9,731,375	liras
on rural lands .	13	" "	543,000	" "	1,190,532	"
on lands both ur-						
ban and rural .	6	" "	897,500	" "	2,103,790	"
	118	" "	5,752,500	" "	13,025,697	"

Large loans prevailed : one was for 600,000 liras and seven for 2,495,000 l., and thus eight loans represented almost 54 per cent. of the total sum lent.

The term of loans was usually from thirty-six to fifty years. In 1915 the lending contracts concluded numbered 160 and covered 7,628,000 liras. Thus in 1916 the number of loans and the sum of capital lent were less than in 1915, partly owing to the abundance of money. The price of the bonds varied from a minimum of 432 liras to a maximum of 448 liras.

Loans in being on 31 December 1916 numbered 2,410 and were for 91,629,295 liras.

In 1916 the *Monte dei Paschi* at Siena granted in bonds sixty loans, for 1,222,500 liras in all.

The *Credito Fondiario Sardo* granted in the same year five loans for 81,000 liras. Loans in being at the end of the year numbered 179 and were for 2,710,157 liras.

Thus the seven institutions which we have mentioned as affording land credit in Italy granted 555 loans for a total sum of 31,006,500 liras in 1916.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

UNITED STATES.

THE FIRST YEAR OF THE FEDERAL FARM LOAN ACT. — *The Economic World*, New York, 22 September 1917, article reprinted from the *Journal of the American Bankers' Association*, September 1917.

The Federal Farm Loan Act was passed on 17 July 1916 (1). It is interesting to take stock of the difficulties that have occurred in applying it and of the degree in which it has satisfied the need for credit of the rural population of the States. The twelve Federal Land Banks had up to 1 August 1917 made loans amounting to \$3,940,400. This total represents loans approved and actually made out of a sum of about \$100,000,000 for which application was made. About \$50,000,000 of this latter sum was applied for through formally constituted channels. The remainder represents the amount which National Farm Loan Associations still unchartered have reported that they wish to borrow as soon as they have perfected their organization.

The lending business did not begin in earnest until July. During that month the machinery of the system was thoroughly in working order and money was put out rapidly. The following figures explain the lending business in July 1917.

Federal Land Banks	Amount applied for	Amount of approved loans	Amount of loans made	Total amount of loans made up to August 1917
	\$	\$	\$	\$
Springfield	735,785	479,100	29,900	36,600
Baltimore	1,261,211	551,400	177,000	257,057
Columbia	2,199,423	1,042,824	43,200	43,200
Louisville	1,547,257	2,072,200	243,000	250,000
New Orleans	10,417,708	3,868,878	149,950	210,265
St. Louis	4,553,560	1,651,620	87,899	—
St. Paul	3,541,250	1,290,300	83,400	115,100
Omaha	3,435,326	985,090	55,450	101,150
Wichita	3,435,090	2,968,950	784,900	1,771,100
Houston	2,788,681	1,350,561	93,130	121,130
Berkeley	—	—	—	391,700
Spokane	3,953,361	2,724,880	434,630	642,005
	34,310,652	16,016,853	2,232,059	3,940,407

(1) See our issues for December 1916, p. 65 and April 1917, p. 55.

The Federal Farm Loan Board believes that loans will now be made with increasing rapidity. The Federal Land Banks were at first handicapped by lack of funds. Some of them made loans in excess of their capital stock, themselves borrowing money to do so in the outside market. The sale of farm loan bonds is however now well under way. The Land Banks and the private banking syndicate which are marketing these securities have already obtained subscriptions aggregating about \$30,000,000. As soon as this money is collected it will be issued to the farmers at the 5 per cent. farm mortgage rate which has been established by the board. The bonds yield interest at the rate of $4\frac{1}{2}$ per cent. The banks expect to pay the expenses of operation out of the margin of $\frac{1}{2}$ per cent. It is the intention of the board ultimately to bring about such complete organization and so to perfect its machinery that this margin will be only $\frac{1}{8}$ per cent. The policy will be to put the saving into the pocket of the farmer rather than the investor in bonds, that is to reduce the mortgage rate rather than increase the yield of bonds. What effect an increase in the war bond rate will have on the sales of these land securities is conjectural. The board believes that the land bonds will go on selling because it will tell the public that to finance the farmer is as important to the war as to finance the soldier, if not more so.

Two elements retard the making of farm loans — the lack of trained men in the banks and the difficulty as to farm titles.

The Federal Land Banks are paying small salaries to appraisers of land, which has made it difficult for them to secure the competent service needed to make their loans safe. Their work is moreover new and they cannot yet be presumed to have passed the experimental stage.

As regards titles it has been found on examining applications for loans that an unexpectedly large number of farmers cannot furnish legal evidence of these. They are not uncertain but merely unattested. Under the statute the Land Banks cannot lend on lands held by such uncertified titles. There is further a lack of uniformity, the attestation of titles being more difficult in some States than others, and every farm loan district embraces several States.

The banks have been led to advocate the adoption of a uniform system of registering titles. Should it be made universal by Federal law farmers would have no difficulty in proving their titles by a reference to the registers. It may be expected that the Farm Loan Board will make some recommendation of this kind to Congress in next winter's session.

The board originally contemplated selling from \$100,000,000 to \$150,000,000 in farm loan bonds a year. Unless the machinery for the actual granting of loans is made to work more quickly it is unlikely that they will be able to do this.

A considerable access of business was expected this autumn because farmers would want money for autumn planting. The board hopes that before next spring — the first full planting season since the system has been completely at work — it will be able to grant loans more expeditiously on all properties which deserve to be financed.

The Federal Land Banks and the Federal Farm Loan Board may prove to be suitable means for the solution of problems even of national importance. It is reported that in certain Southern States the British government has requested British subjects holding in them farm mortgages to call for the payment of the loans and withdraw the money from the country to invest it in British government war issues. It is credibly asserted that the mortgage loans affected amount to nearly \$110,000,000 — far more than the farmers would immediately procure from American investors. Only the Federal Farm Loan system seems to be in a position to take up these obligations. It may have to solve a yet larger problem. In order adequately to participate in the flotation of the war bonds of the United States government, the American life insurance companies may have to reduce to some extent their present large holdings of farm mortgages. Here again the Federal Farm Loan System may be the only recourse open to farmers obliged to pay off maturing mortgages which they had expected to be able to renew indefinitely.

Part IV: Agricultural Economy in General

UNITED STATES.

THE ORGANIZATION OF THE SAMPLE TRADE IN GRAIN IN MINNESOTA.

SOURCE:

THE GRAIN GROWERS' GUIDE, 6 June 1917, Winnipeg (Manitoba).

The enormous grain production in the United States has necessitated a special organization of the grain trade, which has been perfected little by little, and has gradually succeeding in taking the business of estimating grain from the individual, arbitrary and interested judgement of purchasers, and giving it to a body of experts, against whose supervised decisions there is however an appeal. Grain is rapidly classified by a preliminary sampling of consignments in course of transport, and a firm basis for commercial transactions and a safeguard for the interests of growers are provided.

The State of Minnesota provides a typical example of the sample trade. We will explain in detail its organization, which functions with much regularity.

§ 1. THE AGENCIES FOR THE INSPECTION AND CLASSIFICATION OF GRAIN.

In Minnesota grain is sampled and inspected by two independent systems which mutually check each other — the system for which the State itself is responsible, and that due to the Minneapolis Chamber of Commerce or, when grain is discharged at Duluth, the Duluth Board of Trade.

All grain handled at St. Paul, Minneapolis, and at Duluth is governed by the Minnesota laws as to grain and weights and measures, and subject to rules and regulations of the Minnesota Railroad and Warehouse Commission. The latter has three members, elected by the people, and has very wide powers. It makes rules which govern terminal elevators, appoints a chief grain inspector and his deputies, issues all warehouse licenses, supervises the handling, inspecting, weighing and storing of grain, and investigates complaints of fraud and injustice. It not only deals with elevator

companies, but also exercises over the railways a control which obliges them to do their best to make the conditions of marketing grain at their various stations efficient and satisfactory.

^s The Minnesota Railroad and Warehouse Commission is thus the higher official agency for the control of the trade in grain. We will presently show that a special department has the duty of sampling and classifying consignments.

The Minneapolis Chamber of Commerce was formed thirty-three years ago. In the seventies little if any grading of grain was done locally or at termini in Minnesota, and where the operation did take place it was individual and arbitrary. Fair deductions for the foreign substances mingled with grain were not made, the farmer with dirty grain receiving a less price. Wheat growing was largely confined to areas along the Mississippi river, and wheat markets were along this waterway. Buyers made bids for a farmer's grain on the street and he usually received several bids before it was sold. Later a similar system extended itself to various points on the fast expanding railways. Then a large milling industry began to spring up in Minneapolis, and millers competed at local points throughout the country, the farmer often getting more from them for his grain than millers at the head office were willing to pay. The millers consequently formed the Minnesota Millers' Association which had a system of buying grain according to grades. This association almost entirely controlled the grain market in Minnesota for a number of years and was the strongest defender of the grading system. Finally, however the other grain firms and commission merchants joined together and established the Chamber of Commerce which grew rapidly, and a sample market was soon in existence. The Chamber of Commerce has 550 members but some forty companies own and vote for a majority of these memberships. The large milling companies, the line elevator companies and some of the banks are the greatest membership owners. A board of arbitration and a board of appeal are elected annually, and to these all disputes between members, arising in virtue of their membership, may be referred. They are first referred to the board of arbitration, against whose decision appeal may be made, if the losing party desire, to the board of appeal whose decision is final. In addition persons not members of the Chamber of Commerce may place any dispute they have with a member of that chamber before the board of arbitration.

§ 2. THE WORK OF SAMPLING AND INSPECTING.

A) *The Work of the State.*

There are three railway systems as well as branch lines which lead into Minneapolis. On each of them, at a distance of about 150 miles from Minneapolis, there are divisional points at which the State grain inspection

department maintains a staff which samples every carload of grain passing this point (1).

Each State inspection staff consists of a sealer, an inspector and samplers. These men do their work as early in the morning as possible. First the sealer notes the car numbers, records the seals, breaks the seals and opens the car doors. Much emphasis is laid on keeping correct records of seals. The sealer notes any defects he may find in the condition of a car, especially leakage. He is followed by the sampler and inspector. The sampler works under special instructions and is particularly warned to watch for cars loaded with intent to get concealed grain of low grade past the inspector. Each car is probed at least seven times. The samples taken at the several probings are mixed on a cloth at the doorway and placed in a bag holding about three pounds. After the State sampler has left the car the Chamber of Commerce samplers enter it and take samples, but the two groups are under strict instructions not to perform this duty at the same time. The Chamber of Commerce samplers may not break the seal of a car. The car doors are closed and sealed by the State sealer who broke the seals and who keeps a careful record of them. The State samples are placed in locked boxes, each containing fifty of them, are loaded on express trains and are sent to the Inspection Department at Minneapolis. The box in which they arrive is left at the station and sent back to the sampling station, while the samples are taken from the trains to the inspection office by State employees. All such of them as are delivered before seven o'clock in the morning are inspected at once. The inspectors have no knowledge of the ownership of the grain. Every sample of wheat is sifted to determine the amount of foreign matter or *dockage* it contains, and the latter is expressed rather in pounds per bushel than as a percentage as at Winnipeg. As soon as they are graded the samples are returned to the sacks with the dockage, and the grades are entered, with the reasons for assigning them, on the tickets signed by the inspector. A complete record is kept of each ticket. The samples are kept for thirty-six hours or longer, in order that there may be ample time for reinspection and appeal, and the sample sacks are then sold, the profits going to the State Inspection fund.

B) *The Work of the Chamber of Commerce.*

The Chamber of Commerce samples are sent by the same express trains as the others to the various trains to which the cars are consigned, the sampling bureau having secured a list of the cars and their destinations. Both lots of samples arrive ahead of the cars of grain. On the large trading floor of the Minneapolis Chamber of Commerce there are tables, on which the samples received from the Chamber's sampling bureau are displayed in small tin pans. The samples have previously been examined by the ex-

(1) Only the grain originating between these points and Minneapolis or Duluth is sampled at the markets in the latter places.

perts of the various firms to which the cars are consigned. A card, giving the number of the car carrying the sampled grain and the place from which it came, is stuck in each pan. Sales are made on the basis of these samples.

In the meantime inspection lists are placed in the corridor of the inspection office, and all commission houses have access to them. If the commission house expert is not satisfied with the grade assigned to grain by the State he can demand reinspection, and if the result of this still does not satisfy him he can have recourse to the Appeal Board. If there is a discrepancy between the sample secured by the State samplers and that of the sampling bureau, resampling is ordered at once. Indeed resampling may be demanded in any case. This provides a check which reduces chances of incorrect grading to a minimum. When the commission firms have been informed of the grading of the cars, they attach the tickets showing grade to the pans in which their samples are displayed, and these act as a check and guide to trading. Most of the samples viewed before twelve o'clock in a morning are sold on the same day, and the disposition on the railroads of the cars, which have usually arrived, is ordered before four o'clock in the afternoon. The whole selling transactions have usually closed before the cars arrive, and cars are therefore switched without delay to the elevator or mill where they are to be unloaded, or onto the trucks which will take them to lake ports.

C) The Functions of the Boards of Appeal.

There are two boards of appeal in Minnesota, one at Duluth and the Minneapolis Grain Inspection Board at Minneapolis, and each of them consists of three members appointed by the governor of the State. These men have the same qualifications as the grain inspectors, and not more than two of them are of the same political party. Each member gives a bond of \$ 5,000 to the State. It will be noticed that while the Railroad and Warehouse Commission is elective the boards of appeal, which are quite independent of it, are appointed by the governor.

Any owners, consignees, consignors or warehousemen dissatisfied with grain inspection may appeal to the nearest grain inspection board. The fee for reinspection is \$1, refunded if the grade of the grain as to which there is appeal be changed. After such reinspection appeal may again be made to the board of appeal whose decision is final. For such second reinspection the fee is again \$1 which may be refunded as before. Most appeals concern wheat, and there are practically none as to barley the grades of which are so various that its value must be judged almost entirely from samples.

The following figures give some idea of the work done by these boards of appeal. They are for the year ended 31 August 1916.

	Receipts	Expenditure	Profit
Minneapolis. . .	\$ 28,701	\$ 11,130	\$ 17,570
Duluth	14,805	11,290	3,514

Changes in Grading.

	No. of Carloads on which there was Appeal	Grade Raised	Grade Lowered	Dockage Changed
Minneapolis. . .	33,212	2,580	1,033	899
Duluth.	17,446	2,349	185	170

The results expressed in terms of the percentage of the total number of cars on which appeal was made are as follows :

Decision	Minneapolis %	Duluth %
To raise grade	7.77	13.47
To lower grade.	3.11	1.06
To change dockage.	2.71	0.61
Total changes	13.59	15.14
Total not changed	86.41	84.86

The following table shows the percentage of the cars going to both markets of which reinspection was ordered and as to which appeals were made :

	Minneapolis and Duluth	Percentage
Total number of cars inspected.	445,105	
" " " " reinspected.	64,628	14.5
Number of which grade was not changed after reinspection.	50,353	11.3
Number of which grade was so changed. . .	14,275	3.2
Number as to which there were appeals. . .	50,658	11.3
Number of which grade was not changed after appeal	43,505	9.7
Number of which grade was so changed. . .	7,153	1.6

It is the object of the commission firms to get as much as possible for each carload, but all appeals are not made in the expectation of obtaining higher gradings. When a miller buys his grain from commission merchants and thinks it has been overgraded by the inspector, he may demand a rein-

spection or appeal to have its grade lowered, and he very frequently exercises this privilege. Consigners often give specific orders to commission merchants to demand reinspection if the car they are consigning is graded below a certain level. The millers and elevator men meet in competition for the grain, and hence there are many reinspections and appeals. Often inspection, reinspection and an appeal have all taken place before the car which has been sampled reaches the terminal market, so rapid are these operations.

The Minneapolis and Duluth Boards of Appeal have also other functions. They meet annually before 15 September and establish the grades of all grain subject to State inspection. These grades and the results of tests of them are published daily for one week in a newspaper in Minneapolis and in Duluth. All grain received at any public warehouse is graded according to these grades, which are not changed before the next annual meeting without the consent of at least five members of the board. Each board determines the grade and dockage of all grain in cases of appeals from the decisions of the chief deputy inspector, and may for such purpose ask to have fresh samples brought to it straight from the car concerned. It also helps and advises the chief grain inspector, enabling him to instruct the deputy inspectors of grain under his jurisdiction in accordance with the board's decisions and work. It may recommend the Railroad and Warehouse Commission to discharge incompetent inspectors, and may make other reports and recommendations.

D) The Official Sampler.

In addition to the systems of checking we have mentioned there exists an "official sampler", established more than ten years ago by the Chamber of Commerce. This officer is an expert grain inspector of long experience. He has no connection whatever with the State inspection department but is the employee of the Chamber of Commerce. It is his duty to help to adjust disputes between members of this chamber. Thus when a carload of grain is sold on the sample market the buyer takes half the sample to check the grain in the car when it reaches the mill or elevator, and if the grain is not up to sample he appeals to the official sampler who takes a new sample from the car and compares it with that on which the sale was made. The decision of the official sampler is final.

* * *

The organization which we have briefly analysed has made the business of selling grain extraordinarily rapid, putting an end to all the delays to which traffic was subject before the system of inspection was established. Before the sampling points were organized there were, during periods of

congestion, occasions on which more than a thousand cars of grain remained unopened in one railway yard after the morning sampling had taken place. Secondly the two agencies which mutually check each other and the possibility of appeal have caused the grading and the quality of the grain placed on the market to be such as to provide a firm basis for trade, and have eliminated most of the abuses due to bad faith and to the opposing interests of sellers and buyers.

The cost of sampling is negligible. The sampling bureau charges 20 cents for each sample at Minneapolis and 50 cents for each sample at Duluth, these rates having been raised from 15 cents and 40 cents, respectively. The fees of the State department for inspecting and weighing are 40 cents per car per thousand bushels for wheat, oats, barley, rye and speltz ; and 75 cents for flax seed and Indian corn.

FRANCE.

THE CONDITIONS OF RURAL LIFE IN 1913-1914.

OFFICIAL SOURCE :

DUGÉ DE BERNONVILLE (L.) : Enquête sur les conditions de la vie ouvrière et rurale en France en 1913-1914 (*Enquiry into the Conditions of Labouring and Rural Life in France in 1913-1914*) in *Bulletin de la Statistique générale de la France et du Service d'observation des prix*, vol. VI, Part III. Paris, April 1917.

In a preceding article (1) we resumed some facts interesting to agriculture discovered by the demographic and social enquiry, undertaken by the *Statistique générale* of France, into the position of the labouring and rural population in 1913-1914.

We have still to examine certain points included in this enquiry, notably the movement towards the depopulation of country districts and its causes, the phenomena of rural emigration, technical education for agricultural trades, and the incapacity due to health of rural labourers.

§ I. DEPOPULATION OF COUNTRY DISTRICTS.

The diminution in the population of French country districts is due to two causes: emigration into towns or abroad and the less number of large families.

The two question-forms used in the country — for families and for villages, respectively — provided frames in which certain numerical facts as to this double phenomenon could be collected. The form for villages asked that every person who had in 1911, 1912 and 1913 left a commune to settle elsewhere should be noted, together with his sex, age, trade and new address.

It will however be well, before we analyse the data obtained by means of the forms, to give some information as to the population of the places covered by the enquiry and their economic position.

(1) See our issue for July 1917, page 68.

Demographic and General Economic Conditions.

If the total number of inhabitants and the number of births in the 401 rural districts distributed among eight large regions (1) in 1881 and in 1911, respectively, be compared, it is discovered that in thirty years these districts have lost 9,000 out of 312,000 inhabitants or nearly 3 per cent. One hundred of them have however suffered an increase in their population, generally slight, it is true, but in several cases, especially in the regions of the north and east where prosperous industries have been established, considerable. If these latter cases be excluded, the depopulation will seem much more serious than the percentage we have given indicates. In fact, except in Brittany, there are no purely agricultural districts in which the number of inhabitants has increased. The total number of births was 7,966 or 255 per 10,000 inhabitants in 1881, and only 6,572 or 217 per 10,000 in 1911. The ratio is however superior to that arrived at for all France where the number of births per 10,000 inhabitants was 249 in 1881 and 187 in 1911. Thus in the whole country births diminished by 25 per cent., but in the observed districts only by 15 per cent. In Region VIII (West) the diminution was almost negligible, but in the south-east it was more than 25 per cent.

The following table shows the distribution of families in the observed districts according to the occupation of the head of each household. Of the whole number of families the percentage having a head whose pursuit is agricultural, whether he be a landowning or a tenant farmer, an agricultural labourer or a farm servant, is 54. In Region I (north) this percentage is only 38, in Region II (east) 42, in Region III (south-east) 53. In the other regions some two thirds of the heads of families are tillers of the soil. While in Region VI (Central Massif) and Regions IV and V (south) most of them own the land they cultivate, in the west they are mainly agricultural labourers or tenant farmers. In the villages of Region VIII (Brittany and Normandy) in particular more than a third of the total number of heads of families is made up of journeymen and other agricultural labourers and farm servants.

The families of tenant farmers, *métayers* and settlers constitute altogether one tenth of the total number — in the districts of the South-West Region, where *métayage* is common, as much as one fifth.

(1) These regions comprise the following departments: *Region I*: Nord, Oise, Seine-et-Oise, Somme. *Region II*: Ardennes, Meurthe-et-Moselle, Meuse, Vosges, Haute-Marne, Aube, Yonne, Côte-d'Or, Haute-Saône, Saône-et-Loire, Belfort. *Region III*: Ain, Doubs, Jura, Savoie, Haute-Savoie, Isère, Basses-Alpes, Hautes-Alpes. *Region IV*: Alpes-Maritimes, Var, Bouches-du-Rhône, Vaucluse, Ardèche, Gard, Drôme. *Region V*: Lot-et-Garonne, Gironde, Landes, Basse-Pyrénées, Haute-Garonne. *Region VI*: Corrèze, Aveyron, Lozère, Haute-Vienne, Creuse, Haute-Loire. *Region VII*: Charente, Indre-et-Loire, Loire, Loiret, Eure-et-Loire, Sarthe, Mayenne. *Region VIII*: Eure, Calvados, Orne, Seine-Inférieure, Côtes-du-Nord, Finistère, Morbihan.

TABLE I. — *Distribution in the Observed Districts of Families according to the Occupation of their Heads.*

Regions	Number of districts	Total number of families	Percentage of families whose head is						
			Non-farming landowner of independent means	Farming land-owner	Tenant farmer, métayer or settler	Journeyman or other agricultural labourer farm servant	artisan or industrial worker	Tradesman	Man having other occupation
I	64	13,467	6.1	7.5	5.2	25.3	8.9	8.9	38.1
II	78	15,899	7.0	22.6	5.8	13.9	19.0	8.5	23.2
III	68	17,112	6.3	32.5	7.6	12.5	12.8	8.4	19.9
IV	20	7,021	6.5	39.1	8.9	17.9	13.4	6.1	8.1
V	30	4,558	4.8	35.5	20.0	13.2	14.2	5.1	7.2
VI	28	1,345	4.4	47.4	5.9	14.6	11.5	7.5	8.2
VII	51	11,373	11.1	21.0	16.4	27.8	8.2	8.5	7.0
VIII	89	16,395	7.2	11.5	14.3	36.8	7.0	9.0	14.4
Total . . .	428	87,170	7.1	22.3	10.0	21.8	11.7	8.3	18.8

To these figures, which are only approximate, most of the investigators have added their personal observations as to the chief changes which the last thirty years have brought to the economic situation in these districts. These observations can be resumed as follows : a large number of vineyards have disappeared and it has been possible to build them up again only partially and at great cost ; the cultivation of forage crops, stock farming, in some districts dairy farming, market-gardening and forestry have been considerably extended; in general small rural industries have declined and in certain regions factories have arisen.

We will now distribute the facts obtained according to districts :

Region I (North). — Disappearance of the industrial colza and poppy crops ; decline in flax growing in the north. Considerable development of industry on a large scale. Small holdings tend to disappear and give place to large farms. General fall in value of farm-lands. Formation of pasture-lands. A certain number of rural industries still occupy part of the population of the villages of Oise, but the rural workpeople who once combined agricultural labour with industry have with some exceptions entirely given up tillage.

Region II (East). — Disappearance of many vineyards, some of which have been replaced by osier plantations (Ardennes and Meurthe-et-Moselle) and plantations of black-currant bushes (Cote-d'Or) and fruit-trees, and many by artificial meadows. Development of stock farming and progress of the dairy industry, especially in the Region of Belfort. There has been some parcelling of large properties, but at the same time a tendency to unite the parcels until their area allows of pasture-grounds and the profitable

employment of machinery. General fall in the price of land, which has, however, shown a tendency to cease of recent years. Decline of small local industries; the few occupations of this kind still followed are little remunerative and do not prevent the emigration of agricultural labourers. Industrialization of the region.

Region III (South-East). — Land of slight fertility, or lying in the mountainous districts unfavourable to the employment of machinery, is left fallow. Most of the destroyed vineyards have been replaced by artificial meadows. The keeping of milch-cows is very profitable in Jura and Doubs, especially in districts near the towns or industrial centres. The Gruyère cheese industry is making great progress. There is in certain districts of Upper Savoy a development of market-gardening, some of the products finding a market in Switzerland. The selling price of land had much decreased but has tended to rise of recent years. Small local industries are in full decline.

Region IV (South). — Disappearance of madder crops. Crisis in the cultivation of olive-trees owing to a disease of the tree and a fall in the price of the oil. Decline of silkworm rearing: mulberry-trees are being uprooted in many villages. Progress in the cultivation of forage plants and reconstitution of vineyards in Gard and Var. Land on slopes is left fallow, but where the climate allows market-gardening, the culture of early vegetables, table grapes and fruit of every kind has been much developed.

Region V (South-West). — Reconstitution of vineyards; development in stock farming and in the growing of fruit and early vegetables. Horse and sheep breeding has made much progress in Basses-Pyrénées. The production of sheep's milk for making Roquefort cheese is very profitable. In this department the price of land has tended to rise. Progressive disappearance of the charcoal-burning industry.

Region VI (Central Massif). — Vines are still grown on certain slopes. On the level land stock-farming and horticulture are more and more pursued. The dairy industry directed to the manufacture of Roquefort cheese is very prosperous in Aveyron. The lace-making industry, which is little remunerative, is localized in Haute-Loire. The price of land seems to have changed little in the villages of this district.

Region VII (West Central). — Formation of numerous artificial meadows; development of stock-farming and the dairy industry in Charente, where the emigration due to the viticultural crisis tends to decrease while the price of land, which had fallen considerably, is gradually rising. In Eure-et-Loire fallow land has disappeared and given place to beetroot, potato and forage crops; industrial dairies have been set up. The value of land is now increasing in many districts. Disappearance of small artisans. Partial reconstitution of vineyards and osier-plantations in Loiret; installation of sugar-refineries which have entailed a development of beetroot growing. Many grasslands formed in Sarthe, and large extension of early vegetable growing in Mans.

Region VIII (West). — Colza, buckwheat and rye crops gradually given up, and much arable land converted into pasture. Development of

horse breeding and selling and of market-gardening (artichokes and cauliflowers) in certain districts of Finistère. In many villages of Seine-Inférieure flax growing is at present very popular. A general tendency is noted to a fall in recent years of the price of land. Small farming is becoming important to the detriment of large farming : while tenants cannot be found for many large farms, the number of small farms is not sufficient to meet the demand and there is a tendency to parcel large properties. Small industries are disappearing. Important factories have been set up in Calvados.

§ 2. RURAL EMIGRATION.

The enquiry as to rural emigration was carried out with the help of the question-forms of which we have already spoken and which aimed at establishing how many persons had left a village under observation in order to settle elsewhere in 1911, 1912 and 1913, young men who left to serve in the army being excluded but not those of them who did not return after their period of military service. In this question-form one line was given up to each emigrant and in the case of each his date of departure, sex, age at departure, trade before departure, new place of residence (commune and department) and present trade were indicated. The facts culled from the information thus obtained have enabled the study of emigration in 429 districts which had altogether 344,636 inhabitants when the 1911 census was taken.

a) *General Data as to all the Emigrants.*

It was found that in the three years 1911, 1912 and 1913 a total of 7,545 persons had left these districts to settle elsewhere. Of this number 1847, or about a fourth, have been noted as following no trade when they left, more than half of them being less than twenty years old. In this category there are however a certain number of persons — especially women — who should rather be included in the agricultural, commercial or industrial group according to the trade of the respective heads of their families. The remaining 5,698 were grouped as follows in accordance with their trades :

	Total	Percentage
<i>Agriculture (including fishing and forestry) . . .</i>	2,003	25.2
Commerce, industry, transport	2,977	52.2
Professions and civil service	291	5.1
Domestic service	427	7.5
	<hr/> 5,698	<hr/> 100.0

Although the persons supported by agriculture form a majority of the total population of the districts reached by the enquiry, trades connected with commerce and industry are those which furnish the largest contingent of emigrants. It may even be said that, as far as numbers are concerned, agricultural labourers emigrate perceptibly less than others. The

masculine sex is notably predominant among the total number of emigrants. 3,584 persons, or slightly more than half the total number, were born in the commune they left ; 2,333 in another commune of the same department ; and 1,628 in another department. Of the 2,003 emigrants in the agricultural group 1,063 or 53 per cent. left their native communes. This percentage is lower in the groups of other trades.

It has been possible to classify 7,147 emigrants in accordance with their new addresses, those of 398 not being known. It is found that more than half (56.5 per cent.) of these persons have settled in another rural commune, most of them — more than four-fifths — in the same department. A very small fraction, 3.6 per cent., have gone abroad, and the others — two fifths of the total number — have settled in towns. The proportion of emigrants who have transferred their residence to another rural commune is particularly high among cultivators — 61.1 per cent. They are principally tenant farmers, *métayers* and agricultural labourers, but include a few land-owning farmers who have sold their property to buy another and more extensive one in a district where the price of land is lower. The highest percentage of persons who have gone abroad, namely 5.5 per cent., is also found in the agricultural group. Outside the department of Seine the agriculturists who have settled in towns represent 24.8 per cent., within that department 8.6 per cent.

The enquiry also sought to determine the changes in the trades of emigrants which followed on their displacement. In the case of 448 persons no information could be obtained on this point. Of the 7,097 others the majority of the group having no trade remained thus. The figures referring to the agricultural group are as follows :

	Number	Percentage
Have kept their old trades	893	46.3
Follow another trade in the same group	101	5.2
Have changed their trade-group	805	41.8
Have no trade	129	6.7
	<u>1,938</u>	<u>100.0</u>

When these modifications were compared with those appearing in other trade groups it was found that persons belonging to the agricultural group have changed their trade most frequently. More than two fifths of them have adopted new trades having no connection with agriculture.

b) *Emigration according to Regions.*

Out of the totality of 429 districts observed, which have 344,636 inhabitants, it has been found that 7,545 persons left in the three years considered, or 219 per 10,000 inhabitants. This proportion varies, however, with regions : in Region IV (South) it is 151 per 10,000, in Region VI (Central Massif) 446. From the point of view of depopulation it is not this proportion which should be considered, but that which refers only to emi-

gration abroad or to the department of Seine or a town in another department. From this point of view Region VI is the home of the most intense emigration — 273 per 10,000 inhabitants. Emigration works its ravages principally in the mountain villages; in some districts of the plain, where the fertility of the soil allows the development of stock farming and horticulture, it seems to have been partially arrested. Most of the emigrants go to Paris, whence, when they have got together a little nest-egg, they return to their native soil and buy land. Region V (South-West) stands second, especially the department of Basse-Pyrenees which is an important centre for the emigration of men to South America (138 per 10,000 inhabitants). Next to this comes Region III (Alps and South-East) in which the *arrondissement* of Barcelonnette supplies emigrants to Mexico (109 per 10,000 inhabitants). Emigration is of about equal importance in Regions II, IV, VII and VIII (respectively 87, 85, 75 and 85 per 10,000 inhabitants); and is feeble in Region I (North) — 54 per 10,000 inhabitants. We should add that in the north and Brittany a higher proportion of emigrants of all trades move from one commune to another than in the other regions. In Brittany these emigrants comprise a sufficiently high proportion of agricultural labourers who settle in another rural commune without changing their trade. It is noted in particular that a large share of those who go annually to Normandy or Beauce for the harvest do not return.

c) Causes of Rural Emigration.

In order to establish with certainty the chief causes of migratory movements it would be necessary to analyse in detail the position of emigrants in every region. The too restricted number of observations has not allowed this to be done in a way which is very instructive. The following are however the principal conclusions of the investigators on the subject.

If the determining cause of a rural exodus be taken to be a general desire for greater wellbeing, we have still to discover the various reasons which persuade emigrants that this desire cannot be realized in their own villages. We should first recall that it is not the agricultural callings which furnish the largest contingent of emigrants, but the trades connected with industry and commerce. The exodus of rural artisans is explained by the progressive disappearance of the small peasant industries, and this exodus represents a loss of labour to agriculture because a large part of the emigrating population alternated agricultural with industrial work.

As regards the purely agricultural population, a distinction should be made among the wage-earning labourers and the *métayers* and tenant and landowning farmers. The first of these categories furnishes by far the largest number of emigrants. It is the lack of hired labour which is everywhere the chief complaint of agriculture. Agricultural labourers transfer themselves for the sake of the higher wages paid in industry, the conveniences of town life, and the shorter working-days, passed under shelter. Farm servants, engaged by the year, do not suffer from unemployment, but on the whole their position on a farm is sufficiently miserable. They are in the

first place completely dependent on a master, and they cannot hope to have a family ; too often they are ill fed and above all ill lodged. In many Breton farms, for example, it is customary to make the farm servants sleep in shakedown in the stables, near the beasts.

The class of small landowning farmers also furnishes an appreciable if a far less contingent to rural emigration. In their case the movement, which was principally encouraged by the viticultural crisis and the bad prices generally obtained for products about 1900; seems to have been partly counteracted. According to declarations obtained from districts in various regions, it is to be concluded that hired agricultural labour continues to disappear, but that the emigration of those who can till the soil and remain independent has been to some extent arrested. In this connection an investigator of Côtés-du-Nord writes, " It is difficult to find tenants for large farms but there is a demand for small farms in excess of the supply. In this region several young farmers cannot find farms in which to establish themselves. It is the land which is lacking to labour willing to cultivate it, so long as the cultivation is done on the labourer's own behalf ".

Although moral and social causes noticeably influence rural emigration to towns, especially where women, who feel most strongly the attractions of urban life, are concerned, the economic causes for it predominate. So true is this that factories in country districts attract labour as much as those in large centres. Starting from this fact, the decentralization of the great industries has been advised with a view to lessening congestion in the large towns. It has also been recommended that agricultural credit be more widely afforded, especially to young married people who own land but lack capital with which to farm it. Redistribution with a view to a more profitable employment of machinery would also be most useful, as would the development of co-operation, not only in purchasing manures and implements, but also in using in common certain machinery and in selling produce. Finally a movement which has been evident for some years, and which the investigators notice everywhere to some extent, should be encouraged, the movement towards the intensive production of meat, milk and its derivatives, early vegetables and fruit.

d) Reduction of Large Families.

The rural exodus is really itself a natural consequence of the transformation of economic life. The persistently falling birth-rate of France has given to it a certain character of gravity.

The enquiry extended only to households the heads of which had been married for at least fifteen years when it was made. It discovered that of 2,128 of such families only fifty-eight or 2.7 per cent. were childless. The total number of children born to them was 10,752 or slightly more than five a family, and the number of children alive when the enquiry was made was slightly more than four a family. These figures are considerably higher than those referring to all French families.

Almost all the investigators declare the disappearance of large fami-

lies to be determined by the wish of husbands not to increase their expenses. They recognize that the laws for public relief (placing of assisted children in families) have alleviated much distress, but they are usually of opinion that these laws cannot influence the birth-rate. They give as another important cause for the fall in the birth-rate the fear of landowners to see their inheritance divided, and they ask for a modification in the Civil Code which would suppress the obligatory division of a man's property among his children and extend the right to bequeath.

§ 3. TECHNICAL EDUCATION.

There is a space on the families' question-form for indicating what children of a family are already at work and what trade they follow. It was found that 4,080 children were in places — 2,350 boys and 1,730 girls; but information as to their trades was furnished only in the case of 3,208 — 1,965 boys and 1,243 girls. In the case of many girls, in particular, only the word "married" was inserted without further indication.

The following table shows how many children were placed in trades of the various categories :

TABLE II. — *Number of Children Placed, according to Categories of Trades.*

Trade of head of family	Agriculture		Commerce and industry		Professions, civil service		Domestic service		Total	
	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls
Landowning or tenant farmer, <i>métayer</i>	438	248	151	86	33	1	13	68	635	403
Agricultural labourer	222	105	66	55	11	3	7	51	306	214
Artisan, small tradesman	20	9	143	64	16	2	2	13	181	88
Workman	48	19	676	411	19	7	5	72	748	509
Employee	16	5	62	31	16	5	1	8	95	49
Total	714	386	1,098	647	95	18	28	212	1,965	1,263

The following percentages are found in families of each category :

TABLE III. — *Percentage of Children Placed according to Categories of Trades.*

Trade of child placed	Children belonging to families of									
	farmers		agricultural labourers		artisans, small tradesmen		industrial workers		employees	
	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls
Agriculture	69.1	61.5	72.6	49.1	11.0	10.2	6.4	3.7	16.9	10.2
Ind. and commerce.	23.7	21.4	21.5	25.7	79.1	72.7	90.4	80.7	65.5	63.3
Professions, civil service	5.2	0.2	3.6	1.4	8.8	2.3	2.5	1.4	16.9	10.2
Domestic service . .	2.0	16.9	2.3	23.8	1.1	14.3	0.7	14.2	0.7	16.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The real significance of these percentages, which are based on absolute figures, relatively low, and leave out of account that considerable number of children whose trade is unknown, should be estimated with reserve. The enquiry has discovered, with this reservation, that about two thirds of the boys belonging to farmers' and agricultural labourers' families have remained in agriculture, while rather more than a fifth have entered industry or commerce, from 4 to 5 per cent. professions or the civil service, and only 2 per cent. domestic service. Where boys are concerned much the same proportions obtain in the families of agricultural labourers and of farmers, but as regards girls they differ noticeably. The families of journeymen labourers place a larger number of girls in industry and domestic service than do the families of farmers.

§ 4. DISABILITY IN THE AGRICULTURAL TRADES.

Information as to disability among the population of the observed districts was gathered during the enquiry. Every inhabitant was considered to be disabled if he suffered from " a physical or mental infirmity which placed him in a position of inferiority in relation to other inhabitants of his sex, age and trade ". The enquiry on this point covered 453 districts grouping altogether 355,553 inhabitants according to the census of 1911. In all these districts 1,444 persons between thirteen and sixty years old were found to be suffering from physical or mental infirmity. The average was 53 infirm persons per 10,000 inhabitants. This figure comprises 675 persons infirm from birth (19 per 10,000) and 769 (22 per 10,000) whose infirmity was incurred after birth as the result of an illness, accident or other cause. These

769 persons were classified according to their occupations before they became infirm : 272 or 35 per cent. had no calling ; 273 had trades connected with commerce, industry or transport ; 168 or 22 per cent. were employed on agriculture ; ten belonged to the group of the professions and the civil service ; and 46 to that of domestic service.

Thus cases of disability are much less frequent in agriculture than in industry : the difference shown by our figures — that between 35 per cent. and 22 per cent. — would be yet more noticeable if the total number of disabled persons were compared with the total active population in each group. On the other hand disability seems to affect the material situation of the agricultural labourer most gravely, first because he does not enjoy the benefits of the law on accidents of labour, and secondly because he often suffers a considerable reduction in wages. On the whole disabled agriculturists change their occupation rarely ; but there are a certain number of them who have learnt a trade in which their infirmity is no drawback — clog-makers, shoemakers, tailors. These have been able to do this only because they had savings which made a time of waiting possible to them. Many disabled agriculturists become shepherds and cowmen and earn very low wages.

GREAT BRITAIN AND IRELAND.

SETTLEMENT OF EX-SERVICE MEN WITHIN THE EMPIRE AFTER THE WAR.

OFFICIAL SOURCES:

THE JOURNAL OF THE BOARD OF AGRICULTURE Vol. XXIV., No. 6, London, September 1917.
THE LABOUR GAZETTE, Vol. XXV, No. 9, London, September 1917.

The report of the committee appointed by the Secretary of State for the Colonies to consider the measures to be taken for settling ex-service men within the British Empire after the war has recently been issued. The terms of reference were: "To consider and report on the measures to be taken to settle within the empire ex-soldiers who may desire to emigrate after the war. To collect and prepare for distribution to intending emigrants of this class information which shall show clearly the nature of any facilities afforded by the governments of the dominions and States. To advise as to the best methods of making this information accessible to the troops. To make recommendations as to the steps which should be taken by His Majesty's Government, in concert with governments of the States and dominions, for the constitution of a central authority to supervise and assist such emigration".

The committee were informed that the term "ex-soldiers" included ex-service men from both the navy and the army and their wives and children. The committee felt themselves at liberty to consider also the case of widows and orphans of ex-service men and of women who, like nurses and munition workers, had done war work.

Evidence as to facilities for settlement on the land was taken from a) representatives of the overseas dominions, b) various bodies dealing with emigration, c) similar bodies dealing with settlement within the United Kingdom. The committee hold that there is no conflict between the opportunities offered at home and overseas, for both should have place in one great policy of settlement within the empire.

§ I. THE ESTABLISHMENT OF RELATIONS WITH THE TROOPS.

The committee hold that the proper time for distributing information as to opportunities for settlement among the troops is that which will elapse between the cessation of hostilities and the grants of furlough which will precede discharge.

The committee understand that the authorities contemplate issuing to each man, before demobilization, a form on which he will state *inter alia* his wishes as to future employment, and that demobilization committees will be appointed, in connection with the Employment Exchanges, to advise the men as to the various kinds of employment available.

The committee therefore suggest that :

1) The form which each man receives should enable him, if he so desire, to express his preference for employment in the oversea dominions of the empire ;

2) The names of all those who thus express such a preference should be sent for record, with all other relevant particulars concerning them, to the Central Emigration Authority to be constituted as stated below ;

3) The local demobilization committees, in order to advise men as to opportunities overseas, should be in direct correspondence with the Central Emigration Authority, which should issue the necessary literature and full instructions ; representatives of the Central Emigration Authority should visit these committees and attend as many of their meetings as possible ; wherever possible men well acquainted with oversea affairs should be nominated by the Central Authority as permanent members of the local committees.

§ 2. THE SETTLEMENT OF EX-SERVICE MEN AT HOME.

The existing schemes for the settlement on the land within Great Britain of discharged soldiers and sailors are on a small scale. They provide for the settlement of no more than 240 men or, if their wives and families be taken into account, of 1,200 persons. In addition general legislation has provided for all tillers of the soil by the guaranteed minimum price for wheat and oats from 1917 to 1922, and by guaranteeing a minimum wage of 25s a week to agricultural labourers (1).

The attention of the committee was mainly directed to emigration.

§ 3. THE CONSTITUTION OF A CENTRAL EMIGRATION AUTHORITY.

The committee lay stress upon the necessity for the prompt creation of a new Central Emigration Authority.

They make the following suggestions with regard to it :

1) It is undesirable to set up an authority, to deal with the emigration and settlement of ex-service men, which would be independent of any existing or prospective authority concerned with emigration generally ;

2) The oversea governments should be closely connected with the new authority ;

3) It should be in working order before the war is over ;

(1) See our issue for October 1917, page 67.

4) It should be so constituted as to be capable of carrying out any emigration policy on which the home government, in consultation with the oversea governments, may decide.

The committee recal that the Dominions Royal Commission recommended that a central authority should be set up as a department of the home government; and that a consultative board should be appointed, which should include representatives of the oversea dominions and others, and advise the new authority, securing the necessary co-operation between the home and oversea governments with regard to migration. The committee go further than the Royal Commission for they consider that the representatives of the oversea dominions should be connected with the new authority not in an advisory but in an executive capacity.

The committee propose that actual executive duties should be entrusted to a board for whose work a minister of the United Kingdom should be responsible. This minister must appoint the board's chairman, who should be able to devote his whole time to its work. Its other members should include one representative nominated by each of the following: the Colonial Office, the War Office, the Board of Trade, the Local Government Board, the Ministry of Labour, the governments of Canada, Australia, New Zealand and South Africa, one of the Agents General for the Australian States and one of the Agents General for the Canadian Province. The board should also have five unofficial members of whom two should be women.

§ 4. THE QUALIFICATIONS OF EMIGRANTS.

Emigrants should be qualified first by training or experience and secondly by the possession of capital.

The committee lay particular stress on the necessity of providing *training* for men who have not already had agricultural experience. They should generally receive their training in the place of emigration either on a training farm or similar institution or as labourers on a privately owned farm. During the period of training it will be impossible for their wives and families to live with them, and this justifies a postponement of the emigration of many women and children which will lessen the difficulties of transport. In some cases men who have been settled for a short time in a State or Dominion will be able to obtain reduced passages for their wives and families.

The committee recommend that if, as seems probable, the emigration overseas even of the men be delayed for a few months after the war by the lack of available transports, some knowledge of agricultural work should be given to them in Great Britain on the farms established or to be established by the Young Men's Christian Association, the Church Army and other public bodies. The committee attach considerable importance to the suggestion that the home government should provide soldiers, while they are awaiting demobilization, with instruction in carpentering, building and other crafts.

A TABLE ILLUSTRATING GOVERNMENT SCHEMES FOR SETTLEMENT OF EX-SERVICE MEN OVERSEAS.

Dominion or State.	Extent of Individual Grant.	Conditions.	Crops.	Government Loan.	Repayment.	Whether previous experience necessary.	Training.	Capital necessary.	Other Remarks.
CANADA— 1. Dominion Lands.	160 acres in Manitoba, Alberta, Saskatchewan	Free	Wheat, mixed farming.	\$400 (2) maximum.	In 15 years at 5 per cent.	Yes . . .	Dominion Demonstration Farms or with approved farmers.	None . .	Available also for widows of soldiers and sailors who have died on active service.
2. New Brunswick.	10-160 acres.	Cost governed by cost of improvements (clearing, well, house).	Dairy farming, fruit, potatoes.	\$100-£300	10 per cent. on application, balance within 20 years.	Yes . . .	Demonstration Farms.	\$100-£400 desirable	Community settlements to be established, accommodating from 100 to 250 families, with church, public hall, school, etc.
3. Nova Scotia.	Private farms for sale.	Cost from \$120-£3,000.	Mixed farming, fruit, dairy farming, stock-raising.	Up to \$500	Secured by mortgage.	Advisable.	Employment on Farms.	\$300 necessary.	Government will assist in choice of farm and employment in order to gain experience.
4. Quebec. . . .	Land offered in lots of 100 acres.	\$6 per acre, payment within five years.	Heavily timbered land.	—	—	Yes . . .	—	—	Suitable only for native-born Canadians. Within 5 years settler must clear 15 acres, build house and put up a barn.
5. Ontario	160 acres	Free, subject to conditions as to clearing, cultivation and residence.	Root crops and hay.	\$100 . .	In 10 years at 6 per cent.	Yes . . .	Demonstration Farm at Monteth.	Not absolutely essential	Men without experience will be trained at Monteth Experimental Farm at a reasonable wage; and subsequently a farm colony will be established near one of the railways.
6. British Columbia.	Not yet fixed.	Pre-emption claim to land purchasable for £2.	Timbered. Fruit crops, mixed farming.	A fund to be provided.	—	—	—	—	—
AUSTRALIA— 1. New South Wales.	From 2 to 160 acres, 100 acres average.	Rental 2 1/2 per cent of capital value.	Fruit, dairy and mixed farming.	1/4 of holder's interest.	When land becomes available.	Yes . . .	Govt. Farm at Goulburn.	£50, £100 desirable	—

	Interest, per annum for 3 1/4 years.	10-1,280 acres	Rent 1 1/4 per cent. of capital value (average 25s. per acre).	Poultry farms, fruit, mixed farming.	£500 . . .	Within 40 years at increasing rate of interest.	—	Dookie.	No deposit and no rent for first three years. 60,000 acres already set apart and further acres as required and after construction of railways.
3. Queensland . .	—	From a few acres upwards.	—	Wheat, fruit and grazing, acc. to dist.	Liberal advances promised.	On easy terms.	Yes . . .	Farms comprising similar land.	Two large blocks of land N. of Adelaide, Mount Remarkable and Mount Crawford estates set apart, suitable for wheat and grazing.
4. South Australia.	—	(I.) From 160 acres. (II.) 160 acres.	(I.) Payment of survey fee and up to 840 acres at 15s. per acre. (II.) Same terms.	(I.) Wheat. (II.) Fruit-growing, intensive cultivation.	Loan from Agricultural Bank.	—	Yes . . .	Depots to be established at each settlement.	Men can usually find employment on arrival and support themselves while acquiring experience.
5. Western Australia.	—	From 200 acres, according to class of land.	Men must have been previously resident in Tasmania. By purchase or on lease.	Mixed farming, fruit, mostly timbered.	£500 . . .	Within 4 years.	Some experience necessary.	State Farm at Deloraine.	—
6. Tasmania . .	—	Provisions apply only to officers and men of the New Zealand forces and residents who have served in other contingents.	—	—	—	—	—	—	—
NEW ZEALAND . .	—	A limited scheme to be framed.	Openings for settlers who will take up undeveloped irrigation holdings.	—	—	—	Indispensable.	Preliminary training on the spot.	Presence of native labour makes immigration of unskilled labour impracticable.
UNION OF SOUTH AFRICA	—	No special scheme at present.	—	—	—	—	—	—	Main industries depend upon the fisheries, forests, and mines. Farming usually combined with some other occupation.
NEWFOUNDLAND . .	—	British S. Africa Co. offers 500,000 acres.	Practically free of rent to men with requisite capital.	Ranching; some crops.	—	—	—	Locally	Some knowledge of horses, live stock, and handicrafts valuable. Openings for men who can direct the labour of others.
RHODESIA	—	—	—	—	—	—	—	—	—

(1) The Dominion Government has also announced its intention of giving financial assistance to any approved settler on other than Dominion lands in any province of the Confederation.

Some *capital* will be necessary for emigration to almost every country in which the settlement of the soldiers and sailors is contemplated. The amount needed varies from a very small sum in the Prairie Provinces of Canada, Ontario and New Brunswick to £1,000 or £1,500 in the Union of South Africa and Rhodesia. In some cases the land is granted freely; and in most other cases payment for it is distributed over a number of years, varying from five — during which the settler must reside on his holding and clear 15 acres, building a house in the first eighteen months — in Quebec, to thirty in Australia. The oversea governments or the agricultural credit banks are ready to advance money for improvements at a moderate rate of interest; and suggestions for the expenditure of money by the home government in the form of advances of capital were considered by the committee. The amount of capital needed by an emigrant is thus smaller than at first sight appears.

A general consensus of opinion among witnesses before the committee was in favour of the preference of *married* men among the ex-soldiers and sailors for settlement overseas. The committee emphasize the need to facilitate the emigration of women relatives of these men, of widows and orphans of soldiers and sailors, and of other women who may be displaced after the war. They consider the emigration of women to be essential to all effective settlement of the empire; and go so far as to state that they consider grants of money enabling the emigration of wives, children, other women relatives and fiancées of the men to be more justified than grants which would help only themselves.

In every case the *oversea governments* must be satisfied that the immigrants to their territories are persons whom they are prepared to welcome.

§ 5. PLACES OF SETTLEMENT.

The preceding table shows the conditions offered to discharged soldiers and sailors settling in various parts of the empire.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE LEASING OF THE DOMAIN LANDS. — *Boletín oficial de la República Argentina*,
No. 6916, 12 February. 1917.

A decree of the executive power, dated 8 May 1915, had modified the ruling for the public administration of the agricultural law (No. 4,167) of 8 November 1906, in that it authorized the domain lands to be let for a maximum term of twenty-five years (1). But a new decree, dated on the 7th of last February, has amended this provision, alleging that "the leasing of public lands, in large areas and for long terms, without any obligation on the lessee to populate them, to execute on them works making regular farming possible and to improve the soil, thus favouring agricultural progress, is contrary to the fundamental principles of a rational agricultural policy".

Consequently the decree of 8 November 1906 has been renewed in the territories in which it was applicable with the following special modification.

The available domain lands contemplated by law no. 5559 and such reserved lands as the executive power may determine are offered on lease without security of title, precedents to be carefully taken into account. Every tenant must pay in cash the costs of surveys already ordered on the lands offered on lease by the abrogated decree. Rents will be fixed by the Ministry of Agriculture in accordance with the productivity of the lands but must not be less than 200 pesos (2) a year for 2,500 hectares (3).

The maximum area which can be let to one person or society is 10,000 hectares in the territory of Pampa, Rio Negro, Neuquen, Chaco and Formosa, 20,000 hectares in that of Chubut and Santa Cruz.

If two or more persons apply at the same time for a lease of one lot, or if the general manager of the lands and colonies receive two or more applications for one lot, the applicants will be asked, before the matter is submitted to the ministry for determination, if they will consent to receive equal and equivalent shares of the lot. In default of their agreement it will be awarded to the person offering the highest rent.

In virtue of the decree of 1906 tenants of domain lands are bound to plant and preserve in a good state at least five useful trees for every 100 hec-

(1) According to article 50 of law no. 4167 the maximum term of a lease cannot exceed ten years.

(2) 1 peso = 45 at par.

(3) 1 hectare = 2.47 acres.

tares, unless the experts' report shows that their land does not lend itself to tree-growing.

Persons who have previously asked to occupy the lands for rents, without leases, on the terms of the decree of 8 May 1915, should within ninety days, if their applications have been approved by the executive power, declare that they are willing to conform to the provisions of the present decree. After the lapse of ninety days the lots of those of them who have not made such a declaration will be held to be free and can be let anew on terms fixed by the ministry.

The general manager of lands and colonization should be particularly vigilant that no lands are awarded to these tenants which are capable of being cultivated or forming a mixed farm by an application of articles 1 and 2 of the aforesaid agricultural law (1).

The domain lands in question can, in fact, be let only as pastureland.

A later decree, published in the *Bolettn Oficial* for 2 April 1917, ordered an enquiry into the letting of domanial lands.

ITALY.

I. THE NEW MEASURES FOR THE PRESERVATION AND INCREASE OF THE NATIONAL PROPERTY IN WOODS. — *Gazzetta Ufficiale del Regno d'Italia*, Rome, no. 242, 13 October 1917.

In our issues for July and August 1911 we explained the fundamental principles of the new Italian forest legislation, which culminated in the law of 2 June 1910 (no. 277) instituting the State forest domain; and in our issues for September and October 1916 we examined the results obtained by preserving and reafforesting the woodlands. It has now been established by the decree of 4 October 1917 (no. 1065) that within a year of this date the Higher Council of Forests together with the Provincial Forest Committees must propose "the order and the mode of constituting" the forest domain in the various provinces of the kingdom. It is further provided that the following lands may be acquired and expropriated by the Ministry of Agriculture for incorporation in the State forest domain: a) the woodlands and lands to be reafforested, even if cultivated, if they are within the perimeter of the mountain basins to be systematized in execution of general and spe-

(1) These articles are as follows:

Art. 1. — The executive power will cause the domanial lands to be inspected in order to determine their conditions of irrigation, and [the possibility of utilizing them for agriculture, stock-farming, the realization of wealth in trees or forage and other industries, or of establishing villages and colonies on them.

Art. 2. — As gradually such examination and topographical survey are undertaken, the executive power will determine the mode of utilizing the various zones for the objects mentioned in the preceding article, districts suited to the foundation of villages and establishment of stock-farming colonies being reserved. These districts will be suitably divided into lots, their topography being taken into account.

cial laws ; b) parcels of land, even if cultivated, which are included in or adjacent to a State forest domain, if their incorporation in such domain be esteemed necessary to its economic organization ; c) lands, even if cultivated, the expropriation of which is esteemed necessary to the construction of roads of access and to the provision of sites for deposits or other conveniences necessary to the good management of a complex domain. The Ministry of Agriculture is authorized freely to afford technical direction, and to grant the necessary seeds and plants and premiums of from 50 to 300 liras a hectare, for optional re-afforestation and for restoring woods which have much deteriorated. Where an evident opportunity for them occurs the forest administration will also provide for the establishment on the spot of temporary nurseries for growing the shoots necessary to optional reafforestation. As soon as the premium has been paid the woods thus constituted will be subjected, if they are not so already, to the forest regime, that is to the effects of the law of 20 June 1877, no. 3917 (1). The mountain pasturages belonging to the communes and to bodies having an agricultural or moral character should be utilized according to the rules established in the regulations or, failing these, according to the rules prescribed by the forest committee. Such regulations ought in every case to be approved by the forest committee. Where such approval is lacking, or where there is dissension as to the rules contained in the regulation or prescribed by the forest committee, the question will be decided by the Minister of Agriculture after hearing the Higher Council of Forests.

Finally, when a mountain pasturage is owned in common by several proprietors the rules established for the administration and enjoyment of the common property and its improvement will bind even a dissenting minority, if these rules have obtained the approval of the numerical majority of the co-owners and if this majority also represent a majority of interests. Other provisions concern the management of communal woods and the improvement of pasturages.

* *

2. THE DEVELOPMENT OF IMPROVEMENTS IN THE SOUTH. — *Gazzetta Ufficiale del Regno d'Italia*, Rome no. 244, 16 October 1917.

The decree-law (no. 1597), dated 2 September 1917, as to " financial aid for works of improvement granted to the consortia and the development of improvements in Southern and Insular Italy " is of capital importance to national economy. The Deposit and Loans Fund will institute a special branch for granting this aid. It is authorized for ten years to grant to consortia who are concessionaries of works of improvement the loans needed for carrying out the programme of these works within the limits of a total sum of 150,000,000 liras. The sum corresponds exactly to

(1) See the articles already cited in *Bulletin des Institutions Economiques et Sociales* for July and August 1911.

the needs of the works already conceded or in course of being conceded. Such loans will be afforded gradually, according to the various lots of works indicated in the aforesaid programme; and with regard to the graduation of the loans only, the advice must be heard of a committee instituted at the Ministry of Public Works and composed of representatives of this ministry, of the Deposit and Loans Fund and of the Ministries of Agriculture and Labour. The Deposit and Loans Fund is authorized to anticipate in its loans made to consortia for improvements the sums necessary for beginning such works as are economically justified or entrusted to *co-operative societies of production and labour*. The decree-law provides further that the rate of interest to be paid out of the annual income of the State, the provinces and the communes shall no longer be fixed rigidly at 4 per cent. but shall be the rate established by the Deposit and Loans Fund for its ordinary loans.

In the case of the southern provinces and Sicily, where consortia for improvements are slow in arising and improvements have to be undertaken by the care of the State, the decree provides for a further increase of authorized funds up to 20,000,000 liras, to be added to those already authorized, and provides also for the speedier drawing up of technical plans.

Finally where improvements undertaken by the State are concerned the Ministry of Public Works in agreement with the Ministry of Agriculture may, in order to provide for agricultural improvement while the works are in course, nominate a special commission "to promote better co-ordination between hydraulic and agricultural improvements".

* * *

3. THE CULTIVATION OF ABANDONED ARABLE LANDS. — *Gazzetta Ufficiale del Regno d'Italia*, Rome, no. 242, 13 October 1917.

A lieutenantcy decree of 4 October 1917 (no. 1614) establishes that the Ministry of Agriculture shall provide that lists be drawn up of arable lands abandoned by farmers and not directly cultivated by their owners in all those districts of the South and the Islands in which the abandonment of arable lands has assumed notable proportions. The Minister of Agriculture is authorized to grant fit compensation for the cultivation of these lands in the first two years. He will invite their owners to present requests within fifteen days. If an owner do not present such a request, or if when he has presented it he do not begin or continue the works within the prescribed term, the minister may proceed temporarily to occupy the land for a period of no more than nine years. In this case the State will pay a postponed annual indemnity to the owner. Such lands can be ceded by the minister to managers or cultivators or public bodies offering the necessary technical guarantees of their farming.

Disputes as to the application of this decree will be decided, on the appeal of those interested, by the Minister of Agriculture, who will issue a decree, adducing his reasons for it, after hearing the advice of the relevant

commission. There is no appeal from the minister's decision on either administrative or legal points.

* * *

4. THE TECHNICAL EDUCATION OF PEASANTS. — *Gazzetta Ufficiale del Regno d'Italia*
Rome, no. 240, 11 October 1917.

Among recent decrees for the encouragement of agriculture one dated 9 September 1917 (no. 1595), which provides for the technical education of adult peasants, should be mentioned. It provides that in every province the provincial commission of agriculture shall arrange for the organization of such education. Executive duties and instruction are entrusted to an *ad hoc* committee of three or five members to be nominated within this commission. Such committee will comprise the director of the ambulant chair of agriculture or his substitute who will be secretary-reporter, and if the directors of the provincial institutions of agricultural education do not belong to the committee they will be added to it. In order to perform its task, as we have defined it, the provincial commission, bearing in mind the needs of agriculture, will employ the following means: *a*) temporary practical courses on local crops; *b*) temporary practical courses on agricultural industries; *c*) temporary courses on the use of agricultural machinery; *d*) temporary courses on the practice of rural and forest industries; *e*) temporary courses for women on domestic economy and agricultural industries; *f*) practising periods in farms or other establishments. The provincial commission can further use other direct or indirect means suited to its end. The supervision of the technical education of adult peasants belongs to the Ministry of Agriculture.

NOTICES RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

ITALY.

AVANZI (Dr. E.): *Influenza che il protezionismo ha spiegato sul progresso agrario in Italia*
(*The Influence Exercised by Protection on Agriculture in Italy*). Enrico Spoerri, Pisa, 1917.

In this laudable study the author, after protesting that he does not pretend to have solved so complex a problem, affirms that the influence exercised by protection can be circumscribed by sufficiently well determined limits. From the data he has collected and the observations he has made it seems to him particularly difficult to protect agriculture and encourage Italian agricultural progress by imposing protective duties. In practice "while the direct influence of agricultural protection is subject to a large number of circumstances which tend to diminish its efficacy, its indirect influence, which is as a rule injurious, tends to increase more and more as it persists". At present agricultural progress is taking place largely outside the circle of protected agriculture: thus many admirable examples are to be found of the intensive culture of flowers, greens, fruit-bearing plants, etc.; and in the case of these protection is simply an indirect obstacle to commercial expansion. Crops of this kind afford examples of progress and of retrogression, whether or not they are protected. The direct influence of protection affects almost exclusively winter grain crops and rice; other crops — especially vines, olives and oranges and lemons — need a commercial policy of expansion. Dr. Avanzi reaches the conclusion that the protection granted to Italian agricultural products might be gradually reduced.

UNITED STATES.

STEWART (C. L.): *LAND TENURE IN THE UNITED STATES WITH SPECIAL REFERENCE TO ILLINOIS* (*Univ. Illinois Studies Soc. Sci.*, 5 (1916), No. 3, pp. 135, figs. 22).

The author discusses in general the situation regarding land tenure in the United States as a whole, and conditions in Illinois in detail. Among his conclusions are the following:

"It appears that the forms of tenure have been phases accompanying, limited by, and modifying the conditions and changes in the agricultural economy of the State. The prevalence, sectional character, and growth of

farming by tenant operators is chiefly governed by the real value of the shares of the owners and tenants in the surplus of operation. Tenancy forms a sort of cumulative index of the effectiveness of the desire of the owners to escape the operation of their land, and of the ineffectiveness of the desire of tenants to become owners.

"Share tenancy has been more prevalent than cash tenancy, though cash tenancy predominates in the northern part of the State and has been more characteristic of tenants who were advanced in years and who were operating farms whose owners were resident at a considerable distance from their farms...

"The farms of no single form of tenure can be held to be superior in all ways. Managed farms had the highest value in buildings and live stock per acre, and farms of owners were characterized by the highest value of implements and machinery per acre. In values of domestic animals the farms of tenants were below the average when either the total value or the value per head is considered. The farms of tenants were largely devoted to the production of the money crops. This was particularly true of share tenant farms. Yields were superior in the case of farms operated by managers and by cash tenants...

"It was shown by the age statistics that young operators were more generally characterized by tenancy especially on the share basis, and that young owners were most heavily encumbered. Advancing years tended to replace share with cash tenancy, tenancy with ownership, and encumbrance with freedom from mortgage debt. The latest census data, however, indicate that an influence is at work restraining this movement...

"Farming efficiency in the future will probably consist to a greater extent in the ability to increase net profits through cooperative dealing with the market. The efficiency test must, therefore, rule more strongly against operators of the tenures whose characteristics are opposed to successful co-operative efforts on their part.

"It is not necessary, however, that the farmers of other tenures operate as efficiently as the owners themselves would operate. If owners prefer to have their land operated by others than themselves, and if their holdings are sufficiently large, they may content themselves with the financial disadvantage resulting from their refusal to operate their own land...

"The test of productive efficiency may be somewhat slow in acting and costly but it bids fair in the long run to penalize unsound farming regardless of the tenure of the operators, and to guarantee, therefore, the survival of the best forms of tenure and of the best individual operators".

INTERNATIONAL INSTITUTE OF AGRICULTURE

BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXXIV.

8TH. YEAR: NUMBER 12

DECEMBER, 1917.



ROME

PRINTING OFFICE OF THE INSTITUTE

1917

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Part I: Co-operation and Association

GERMANY.

THE "LANDSCHAFT" OF POSEN FROM 1 JANUARY 1914 TO 1 JANUARY 1916.

SOURCES :

VERWALTUNGSBERICHT DER KÖNIGLICHEN DIREKTION DER POSENER LANDSCHAFT BETREFFEND DAS JAHR 1914 NEBST DEN VERHANDLUNGEN DES ENGEREN AUSSCHUSSES DER POSENER LANDSCHAFT VOM JUNI 1915. Ostdeutsche Buchdruckerei und Verlagsanstalt. A. G. Posen, 1915, 86 pp.

VERWALTUNGSBERICHT DER KÖNIGLICHEN DIREKTION DER POSENER LANDSCHAFT BETREFFEND DAS JAHR 1915 NEBST DEN VERHANDLUNGEN DES ENGEREN AUSSCHUSSES DER POSENER LANDSCHAFT VOM 27 APRIL 1916. *ibid.* 57 pp.

The importance of the *Landschaft* of Posen, from the point of view of land and agriculture, is certainly not new to the readers of this Review who have been able more than once to acquire information as to its methods of working and activity. We need not therefore insist on the value of the data in the two publications cited at the head of this article, which enable us to analyse the reports for 1914 and 1915 of the administration of the *Königliche Direktion der Landschaft* and those of the committee and of the Bank of the *Landschaft* with the remarks of the commissioners of accounts and the schemes for a budget. The elements thus collected are instructive and allow us to apprehend the complete vitality of this movement.

The *Landschaften* are, as will be remembered, societies which grant to landowners within their respective spheres of activity loans secured by the value of their properties. The amount of the loan granted is represented by bonds and negotiable titles to land issued from year to year at varying rates of interest, at from 3 to 4 per cent. in the case of the society with which we are now concerned. The bearers of the titles issued in one year form within the society a small association, for each of these groups of titles is subject to the same rules as to the amortization of the sums borrowed. A special bank, called the *Landschaftliche Bank*, undertakes the purely financial work of the *Landschaft*. In certain cases, when a borrower cannot meet his engagements, the society undertakes the administration of the property representing the value of the debt contracted, and sometimes proceeds to sell all or part of the pledged lands. These are the essential features of the

methods of the *Landschaften* in general and the *Landschaft* of Posen in particular. We have thought it well to recal them briefly.

* * *

Since 1867 the business of the *Landschaft* of Posen has followed the regular course which characterizes a sound institution. From year to year it has improved its total operations. In 1913 and up to the time of the outbreak of war it was planning to use for paying life insurance premiums, to the profit of those borrowing on land, the amount of the amortization funds of its new 3 $\frac{1}{2}$ and 4 per cent. titles, but events did not allow this measure to be carried out: its execution will probably have to be postponed until after the conclusion of peace. We should note however with regard to another question, that the increasing of the funds owned in its own right by the *Landschaft*, which was the object of a proposal by the committee of internal administration in 1914, was decided in 1915. It was resolved that after the war ended, as soon the bill exchanges should reopen, these funds would receive an addition of 750,000 marks from the balance of the Bank of the *Landschaft*, and thus the latter would also be enabled to increase the amount of its loans.

Meanwhile contracts for loans covered, in the first half of 1914, 9,624,600 marks of bills on the old system. The issue of these was stopped on 31 May and business was done with the new titles at 3 $\frac{1}{2}$ and 4 per cent. As will be seen from the few following figures the latter titles have the preference. The loans were divided between the two kinds of titles as follows:

In new bills - 4 per cent :		30,239,400 marks
that is : 1st half	20,160,000 marks	
2nd half	10,078,800	"
In new bills - 3 $\frac{1}{2}$ per cent		100,700 "
that is : 1st half	45,800	"
2nd half	54,800	"
giving a total of		30,340,100 "

which, added to 9,624,600 marks of titles on the old system, gives for 1914 a total of 39,964,700 marks of bills placed. In 1915 the corresponding transactions reached 6,199,300 marks. This means that business was limited to supplying the strictly necessary demand for credit, and the reports for 1914 and 1915 concur to prove that such will be the case while the war lasts.

The market price of new 4 per cent. titles passed from 91.80 per cent. to 94.30 per cent. on 1 May 1914. It was quoted as 94.40 per cent. on 15 July, then sank slightly while the outbreak of war was expected daily, and finally stopped on 29 July at 93 per cent. As regards the new 3 $\frac{1}{2}$ per cent. titles business during the war has been too slight to make the subject of a quotation on the market.

* * *

1914 was the twenty-fifth year in which the Landschaft of Posen had been active since it had founded a special fund for loans on land, the *Posener landschaftliche Darlehenskasse*. It had already become one of the chief financial establishments in the province. In these twenty-five years it succeeded in repaying 2,000,000 marks of its foundation capital on which it also paid interest at the rate of 3 per cent. This repayment had been accomplished at the beginning of 1911. From then until the end of 1914 the Landschaft realized a profit balance of 1,247,344.30 marks. Moreover while it was making repayments it constituted a reserve fund of 1,000,000 marks, the limit anticipated by the by-laws.

The following figures allow of a comparison of its turnover for three years.

Turnover in	1913	405,709,849.59	marks
" "	1914	515,494,023.89	"
" "	1915	498,052,288.82	"

The net profits in these three years were as follows :

Net profits in	1913	343,332.96	marks
" " "	1914	408,355.55	"
" " "	1915	392,022.84	"

These represent, respectively, 11.44, 11.85 and 13.06 per cent. of the 3,000,000 marks of capital engaged. In conformity with § 11 of the by-laws of the Bank of the Landschaft of Posen, dated 24 February 1890, the total amount of these profits is paid into the funds held in its own right by the Landschaft.

These figures are the more significant because they represent definite results. They are evidently the final point of a quantity of operations bearing on the titles of the Landschaft. The two reports which we are examining are a detailed exposition of the transformations and renewals of the various categories of titles issued. If we abstract for each category the exact sum of the amount of the transactions really added to those of preceding years, we will obtain a sufficiently clear picture of the progress of the Landschaft.

I. The situation of new investments of 1914 was as follows :

a) in 3 ½ % bills (without letter)	2,347,700
b) in 3 ½ % bills assigned to the fourth sixth of the letter C. titles.	1,045,000
c) in 4 % bills letter D.	3,311,200
d) in 4 % bills assigned to the fourth sixth of the letter E titles.	1,289,000
e) in new 3 ½ % bills	100,700
f) in new 4 % bills.	7,851,700
giving a total of.	15,945,300

whence must be deducted :

for disburdening 75 properties or parcels of such, partial extinctions	2,960,200
which gives the net figure of	12,985,100

The corresponding position in 1915 was as follows :

a) in new 3 ½ % bills	10,000
b) in new 4 % bills	3,571,200
giving a total of	3,581,200

whence must be deducted :

for disburdening 28 properties or parcels of such, partial extinctions	2,615,500
which gives the net figure of	965,700

II. The detailed position with regard to titles bearing interest at the end of 1914 was as follows :

bills of the annual associations	4 %	9,447,900
» » » » »	3 ½ % (without letter)	194,337,900
» » » » »	3 ½ % (letter C)	35,663,300
» » » (letter A)	3 %	4,077,200
» » » (letter B)	3 %	965,300
» » » (letter D)	4 %	103,925,400
» » » (letter F)	4 %	37,741,900
new bills	3 ½ %	125,700
» »	3 ½ %	37,138,600

giving a total of 423,423,200

whence must be deducted the total amount of amortizations
including extinctions on 2 January 1915 27,217,900

which gives a net amount of . . . 396,205,300

to reach the amount of titles in circulation on 31 December
1914 the value of those paid into reserve and guaran-
tee funds must be taken into account 21,351,700

thus the bills in circulation at this date represent . . . 374,853,600

The corresponding position in 1915 was as follows :

bills of annual associations	4 %	7,811,000
» » » (without letter)	3 ½ %	192,014,400
» » » (letter C)	3 ½ %	35,421,000
» » (letter A)	3 %	4,053,400
» » (letter B)	3 %	734,200
» » (letter D)	4 %	103,092,600
» » (letter E)	4 %	37,267,100
New bills	3 ½ %	135,700
» » 	4 %	43,291,500

giving a total of . . . 423,820,900

whence must be deducted the total amount of amortizations
including extinctions on 2 January 1916 28,533,400

which gives a net amount of . . . 395,287,500

to reach the amount of titles in circulation at the end of
1915 the value of those paid into reserve and guaran-
tee funds must be taken into account 22,297,700

thus the bills in circulation at this date represent . . . 372,989,800

* * *

The account of the funds belonging to the Landschaft
in its own right shows at the end of 1914 for 3 ½ %
bills (without letter) 1,280,000
in coin 399,805.69

at the end of 1915 the fund of 3 ½ % titles was un-
changed 1,280,000
we must add - in coin 49,134.98
and a nominal amount of 800,000
subscription to war loan 1915
and a nominal amount of 400,000
subscription to war loan 1916
funds supplied by profits of years 1913-1914 and 1915

In 1914 and 1915 no property securing a loan was sequestered. In
1914, on the other hand, proceedings for sales by auction were entered into
in connection with 46 properties :

a) at the request of the Landschaft in the case of the following
properties :

Boruschin	no. 17	District of	Obornik,	having area of	12.78 hectares
Königsruh	no. 9	"	"	"	24.48 "
Schwarzhauland	no. 5	"	"	"	11.42 "
Turowy		"	" Pleschen,	"	195.99 "
Bolechowo	no. 38	"	" Posen-Ost,	"	154.97 "
Kobelnitz	no. 14	"	"	"	15.47 "
Grünweiler	no. 8	"	" Rawitsch,	"	10.33 "
Biernatki	no. 9	"	" Schrimm,	"	16.10 "
Jaskulki		"	"	"	268.20 "
Lindenhain	no. 12	"	"	"	13.82 "
Xlengiński	no. 12	"	"	"	10.49 "
Wodzisko	no. 2	"	" Wreschen,	"	53.63 "
Netzort	no. 177	"	" Bromberg,	"	9.77 "
Nikelskowo	no. 41	"	" Kolmar,	"	10.35 "
Skubarczewo	Rgt.	"	" Mogilno,	"	255.71 "
Wolwark	no. 81	"	" Schubin,	"	17.66 "
Blumendorf	no. 1	"	" Strelno,	"	23.20 "
Grossee	no. 84	"	"	"	10.22 "
Kleinsee	no. 24	"	"	"	48.53 "
Lugi	no. 2	"	" Wilkowo,	"	69.69 "
Schwarzenau	no. 22	"	"	"	21.40 "
Grüne	no. 25	"	" Lissa,	"	22.03 "
Birkenbruch	no. 18	"	" Wirsitz,	"	14.16 "
Chlewo	no. 32	"	" Schildberg,	"	9.10 "
Drewno	no. 18	"	" Zuin,	"	74.20 "

b) at the request of other creditors in the case of the following properties:

Nieder-Alt-Driebitz		District of	Fraustadt,	having area of	314.60 hectares
Briesen	no. 1	"	" Obornik,	"	129.89 "
Duschnik	no. 196	"	" Samter,	"	11.62 "
Robrwiese	no. 6	"	" Schrimm,	"	20.23 "
Landau	no. 17	"	" Schroda,	"	17.99 "
Otoczno	no. 22	"	" Wreschen,	"	24.57 "
Grocholl	no. 15	"	" Bromberg	"	8.15 "
Romanshof. O.G.	no. 78	"	" Czarnikau	"	7.62 "
Steinbornsgut	Ant. II.	"	" Pilehne	"	41.72 "
Schönbrunn	no. 25	"	" Gnesen,	"	103.51 "
Penchowo	no. 31	"	" Hohensalza	"	8.80 "
Schneidemühl	no. 400	"	" Kolmar	"	118.63 "
Wilsbach	no. 4	"	"	"	109.46 "
Zendowo	no. 19	"	" Schub'n	"	29.83 "
Fünfhöfen	no. 4	"	" Strelno	"	192.69 "
Rudki Lgt. *		"	" Obornik,	"	245.56 "
Lobendorf	no. 9	"	" Schroda,	"	11.08 "
Skarbozewo	no. 20	"	" Wreschen	"	23.57 "
Blumendorf	no. 10	"	" Strelno	"	34.85 "
Gromaden	no. 61	"	" Schubin	"	26.07 "
Grossee	no. 79	"	" Strelno	"	23.04 "

In 1915 proceedings for sales by auction were entered into in the case of 60 properties, at the request of the Landschaft in that of 25 and at the request of other creditors in that of 35. The report of the Landschaft for that year gives no details as to area.

* *

At the end of 1914 the following properties guaranteed loans which had been made :

a) 4,559 holdings, each containing land worth 15,000 marks or more, having a total area of 947,186 hectares and securing loans amounting to 393,914,900 marks.

b) 5,598 holdings, each containing land worth at least 15,000 marks, having a total area of 94,891 hectares and securing loans amounting to 29,508,300 marks.

The corresponding figures for 1915 are as follows :

a) 5,575 holdings, each containing land worth 15,000 marks or more, having a total area of 933,187 hectares and securing loans amounting to 394,038,500 marks.

b) 5,663 holdings, each containing land worth at least 15,000 marks, having a total area of 95,781 hectares and securing loans amounting to 29,782,400 marks.

* *

At the end of 1914 the report on forestry gave data as to 40 holdings having a total area of 20,901 hectares of woodland and worth altogether 11,977,300 marks. This value, calculated as additional to that of the soil only, gives an average of 546 marks a hectare. Of the 40 holdings, 27, having a total area of 16,863 hectares and worth as security 9,363,900 marks, could profit by a supplementary loan ; but a domain of 317 hectares of forest land, worth as security 127,600 marks, was debarred from the grant of such a supplement.

The only modification in this connection in 1915 consisted in granting the supplementary loan to 28 properties, having a total area of 17,583 hectares of forest land, worth as security 9,817,300 marks.

In 1914 the Landschaft dealt with 18,827 transactions ; in 1915 with 11,933.

* *

To complete the data from the report of the Landschaft we give those which refer to the bank on 31 December of the three years 1913, 1914 and 1915.

In hand. — 1913 : 416,439.16 marks — 1914 : 514,648.77 marks — 1915 : 234,812.26 marks.

Current account. — 1913: 3,895,575.84 marks — 1914: 6,774,486.70 marks — 1915: 8,156.62 marks.

Account of Lombards. — 1913: 137,500 marks — 1914: 312,600 marks — 1915: the figures are wanting.

Deposit account. — 1913: 1,858,717.82 marks — 1914: 2,669,589.68 marks — 1915: 2,435,151.50 marks.

Advance account. — 1913: 5,087,193.92 marks — 1914: 4,624,821.29 marks — 1915: 7,987,380.21 marks.

Bill accounts. — 1913: 2,300,311.89 marks — 1914: 5,436,679.32 marks — 1915: 3,959,005.83 marks.

Account of bills to be received. — 1913: 1,126,970.14 marks — 1914: 993,962.82 marks — 1915: 1,009,722.65 marks.

Commission account. — 1913: 136,151.46 marks — 1914: 61,109.98 marks.

Interest account. — 1913: 221,592.53 marks — 1914: 334,189.91 marks

The costs of administration which were anticipated at 145,646 marks were only 142,380.49 marks in 1914. In 1915 they were anticipated at 172,446.50 marks and 166,167.43 marks were actually spent.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

GREAT BRITAIN AND IRELAND.

CO-OPERATIVE FISHING IN THE ARAN ISLANDS. — *Better Business*, Vol. III, No. 1, Dublin, November. 1917.

A. Foundation. — The Aran Islands are situated in the centre of Galway Bay, about thirty miles due west of the town of Galway and equidistant from the coasts of Clare and Galway by about ten miles. In 1891 they were bought from the landlords by the Congested Districts Board. In September 1915 the Aran Co-operative Fishing Company was organized by the Irish Agricultural Organization Society at Kilmurvey, a small village in Inishmore, the northern island of the group. The office and headquarters of the society were established in a little curing store, rented, together with the curing apparatus, from the Congested Districts Board for £2. 1s. 0d. a year. The society then obtained from this board a loan of £150 in cash and a loan of stock, consisting of salt and barrels, of the value of £150. To allow the accumulation of sufficient working capital members agreed to forego all payment for their fish for about six weeks, that is until the cured fish had been sold, when they would be paid in full for all they had supplied.

B. Formation of Share Capital. — Every member must on joining the society pay an entrance fee of sixpence and one shilling towards the purchase of one share of £1. The balance of their shares is paid for by members by deductions of one shilling in the pound from all payments made to them for their fish. When each of them has thus bought one share the society can continue to make similar deductions until the total amount deducted provides a capital equal to its needs. The deductions are credited to the share account of each member as shares or in part payment of shares. The committee has power to decide what number of shares shall be held by a member. Thus a member's interest in the society increases automatically in proportion to his participation in the society's trade — an ideal state of affairs.

C. The Co-operative Supply of Fish. — By the important rule known as the Binding Rule the society and its individual members are mutually bound, the society to buy all the fish which a member has to sell, the member to sell to the society all the fish he catches. The obligation is limited to the fishing season, of which the committee determines the exact duration. On the society's side it is further limited by the proviso that the fish be delivered in good condition and at times warranted by market conditions and rendered possible by the custom of the trade, and that such fish

be suitable for sale under the brand or brands authorized by the society. Due provision must be made, before paying for fish, for all working expenses, interest on and reduction of loan capital, depreciation of property, the creation of an adequate reserve fund and other charges incidental to the business of the society. In case of failure duly to accept fish the society must pay one pound by way of damages to the injured member; and a member who without the committee's written consent disposes of his fish except to the society must similarly pay one pound to the society, unless the latter prefer to penalize him by excluding him from the right to deliver fish for a certain time. The society and its members are respectively absolved from obligation to obey the Binding Rule if the work of the society cease owing to accident, labour or trade disputes, or another cause over which they have no control.

D. *The First Two Years of Business.* — The society began to trade at Kilmurvey in September 1915 when it comprised one hundred members, owning fifteen curraghs.

The crew of a curragh consists of a skipper and three men. Each carries nets to a length of about 400 yards, made up of six joined pieces, 35 fathoms long. The curraghs can easily undertake the autumn mackerel fishing which lasts from September to January and is inshore fishing. They set their nets about three miles from the shore. In the morning, if the catch is heavy, they may have to make more than one journey, bringing in two or three-pieces of their nets at a time. From September 1915 to January 1916 the society sent to the outside market only cured mackerel; for the steamer which connects Inishmore with the mainland calls at Kilronan, which is five miles from Kilmurvey, and calls there only twice a week.

The spring mackerel fishing takes place in April, May and June, and it is deep sea fishing. It is undertaken by boats larger than the curraghs, locally called "nobbies". They go out some miles from the shore at night and return in the morning with their catch. In 1916 the society was able to take part in the spring mackerel fishing because it was joined by five nobbies from Kilronan. Its headquarters were moved to the pier at Kilronan, Kilmurvey becoming a mere branch. Throughout this season and the following spring and autumn seasons its activity developed.

The *system of payment for fish* has been adapted to the fact that whereas the organization is based on the principle of one man one share, the society actually trades not with individual men but with crews. Each nobbie has a crew of seven men, including the skipper who borrows from the Congested Districts Board money to buy his boat and gear. When the boat arrives in the morning with its catch the fish are counted in long hundreds (one long hundred = 126) and the manager of the society gives the skipper a docket to show how many have been received. The fish are then either cured or shipped in boxes containing one long hundred each. Payments are made about once a fortnight or at such other convenient intervals as the committee from time to time appoints. The skipper presents his docket and is paid the full current price of the fish, calculated by long hundreds. He keeps one half of the sum in order to pay back to the

Congested Districts Board its loan for the purchase of his boat and gear; from the other half he deducts a small sum to cover the provisioning of the boat at sea and other expenses; and the remainder is then divided among the crew in equal shares, from which, as already explained, they pay a shilling in the pound towards the accumulation of share capital. In the case of motor-boats the running expenses of the engine are deducted in equal halves from the share which goes to pay for the boat and the share which goes to the crew. In the case of a curragh, where the initial expenditure on buying the boat is small, the money received for the fish is paid in equal halves, the one to the skipper and the other to the rest of the crew.

The society has brought about a very important *rise in the price of fish*. Before it was formed the fishermen received from 4s. to 6s. for a long hundred of mackerel. Since its formation the corresponding average prices have been as follows: autumn 1915, 12s.; spring 1916, 8s.; autumn 1916, 17s. to 22s.; spring 1917, 18s.; early part of autumn 1917, 17s. Thus prices have been doubled and in some cases trebled.

An amazing increase of *turnover* has been secured. During the first eight months the turnover was £760; and the expenses amounted to £380, including £224 for barrels and salt, £110 for wages and £27 for freight. In the last eight months the turnover has been £14,000; and the expenses have amounted to £4,700, made up of £2,800 for freight and commission, £450 for wages, £1,100 for packing and £350 for ice.

It is seen that the ratio of *expenses* to turnover has throughout been very high, a circumstance almost unavoidable in the fish trade owing to the high prices which have to be paid for requisites. Thus boxes, which are returnable but are seldom returned, cost 2s. each two years ago but now 5s.; barrels, which are not returnable, 4s. 2d. each two years ago but now 9s. 6d.; salt 32 s. a ton two years ago, now 10s. a ton. The Congested Districts Board used to sell a basket of crushed ice, weighing 6 stone, for about 2s. During the war they raised this price to 3s. 6d., and recently they have ceased to supply ice to the West of Ireland, so that the society will have to buy ice from a Dublin firm at 30s. a ton on the pier at Aran. In order to avoid this large expense, which is likely to increase, the society contemplates buying an ice-making machine, which it could use profitably owing to the excellent water supply provided by the Congested Districts Boards. As prices are daily rising the expenses of the society will probably grow, but the increase of trade will lessen the ratio of expenses to turnover, a fact illustrated in the last two years which have been years of rising prices.

The *share capital* of the society amounted at the time of foundation to £5, at the end of the first year it was £27, and at the end of August 1917 it was £143. A very satisfactory reserve fund has moreover been accumulated.

The *membership* has risen from 100 to 184. In September 1915 the members used only fifteen curraghs but now they use nearly forty curraghs, and eleven nobbies of which four are motor-boats. Of all the boats of Inishmore only five curraghs and a couple of nobbies, one of them belonging to a London firm, are outside the society.

The society has gradually enlarged its premises. It now rents from the Congested Districts Board two or three large stores in addition to some smaller stores on the pier; and it has recently bought from the board for £50 the fee simple of a large and commodious store, which will be repaired and fitted up as a curing station and used as such in bad weather. At present fish are cured in an open yard by the shore and after a heavy catch the curers may have to work all night.

The society's "shamrock" brand is already becoming known on the fish market and will soon be famous. The fishing seasons have been prolonged by a month or six weeks. On Inishmore that work of development which the Congested Districts Board has attempted ever since it entered into possession in these islands has been much accelerated. The fishing industry has been established on a sound and lasting basis. Twenty years ago the whole wealth of the Aran Islands was represented by the potato patches, the pigs which were fed for a small return, the few cattle, the kelp and the carrigeen moss, and the fish which were sold precariously at low prices. The Congested Districts Board subsidized the steamer which regularly connects the islands with the mainland and the greater markets, advanced money for the purchase of boats and fishing gear, and brought over Scots to teach better methods of fishing. But until the society was founded the progress made was comparatively slight. Now the fishermen of Inishmore find themselves able to earn what is to them wealth; and the whole population of the islands have had a lesson in the value and practice of co-operation.

E. Prospects of Further Development. — Hitherto membership of the society has been confined to Inishmore but last year the men from the south and middle islands — Inisheer and Inishman — brought their fish to Kilmurphy and sold it to the society. They now wish to enjoy the advantages of co-operation. That they should form their own separate societies is highly unadvisable: the steamer does not always call at their islands which have no piers; it would be very difficult to collect among them the necessary amount of capital, and equally difficult to find among them an efficient manager who would be their true leader. The obstacle to admitting them to membership of the existing society is that its considerable reserve fund is the exclusive property of the present members, and that these were solely charged with the heavy initial expenses. It would however be possible to extend the membership to the southern islanders if a large amount of the reserve fund were allocated as share capital in proportion to trade done with the society. Branches like that at Kilmurphy could be established on Inisheer and Inishman, on each of which a headman would be employed to issue the dockets and superintend the curing. The chief remaining difficulty would be the representation of the southern islands on the committee. If the scheme for extension of membership materializes the society will probably buy a motor-boat which will collect the fish from Inisheer and Inishman and bring it to headquarters for shipment, and which might also carry fresh fish to Galway on days when the steamer does not run.

So far the society has not supplied oil, nets or other requisites to its members, and has left the function of making loans for the purchase of boats and gear to the Congested Districts Board. But in time it may take over these enterprises. When the principles of co-operation are better understood by the fishermen it may come about that they provide themselves with all the necessities of life by means of the society's organization.

The fame of this society has spread among the fishermen of the Galway coast, and in one or two districts the leading men are now disussing whether they cannot co-operate like their fellows in Aran.

ITALY.

I. FACILITIES FOR THE LEASING OF DOMANIAL LANDS BY CO-OPERATIVE SOCIETIES. — *Gazzetta Ufficiale del Regno d'Italia*, Rome, No 253, 26 October 1917.

The decree-law No. 1676, dated 20 September 1917, satisfies an old desire of agricultural co-operative societies in that it fitly provides, for co-operative labour societies, facilities for leasing domanial lands and the State's fishing rights in public waters. It allows properties which may be let privately to be let, on far more liberal terms than is usual, to legally constituted agricultural, producers' and labourers' co-operative societies. Every limitation regarding these leases is removed; and their term is extended to nine years with an option to the government to extend it further if obligations on the lessees to make improvements or carry out particular works are imposed.

* The same decree grants special facilities to co-operative societies in the matter of giving securities and guarantees for the obligations they assume, securities being limited to a certain fit quota payable together with an extra annual due. The intention is to guard the societies against usurers and against an anticipation of large capital which would damage the economy of their farms.

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2. THE INTERNAL REORGANIZATION OF THE ITALIAN CO-OPERATIVE MOVEMENT. — *La Cooperazione Italiana*, Milan, No. 1260, 7 September 1917.

Recently there was a meeting at Milan of the managing council of the *Lega Nazionale delle Cooperative* and the three central commissions of co-operation (1), in order to consider the reorganization of the co-operative movement. After ample discussion those present agreed to devote their activity to realizing the following programme: 1) the reorganization of the *Cattedre della cooperazione e della previdenza* (Chairs of Co-operation and Thrift), with a central office at Milan and branches in all the more important centres in Italy, for the popularization of the principles of co-operation and thrift and for giving help in administration and book-keeping to

(1) See our issue for September, 1917, page 15.

all co-operative and mutual societies in Italy indiscriminately; 2) the co-ordination of co-operative production and labour under the guidance and direction of the Co-operative National Committee of Labour (1); 3) the consolidation of co-operative consumption around its federal organization, the Italian Consortium of Co-operative Consumers' Societies, which has for years existed at Milan and which ought to modify its by-laws in order to be able to admit to its membership the associated consumers and the victualling institutions which, owing to the necessities of the time, have arisen for the defence of consumers; 4) the constitution of federations of co-operative agricultural societies, having both united and individual government, for acquiring, exchanging and selling the material necessary to agriculture and agricultural produce.

The directing council of the league and the three commissions mentioned also decided to present to the President of the Council of Ministers, and the Ministers of Agriculture, Industry, Commerce and Labour, Public Works, the Treasury and Finance a complete memorial as to the desires of co-operative organizations. This will support the urgency of *a*) a revision of all legislation on co-operative societies which, it is recognized, no longer responds to the development of the co-operation of the Central Commission of Co-operative Associations at the Ministry of Industry, Commerce and Labour; *b*) the establishment of forms of land settlement by means of collective leases of lands to be improved, large estates and the domanial lands of communes, religious bodies, etc.; *c*) the grant to co-operative societies of production and labour of means of carrying out public works which will better respond to national interests; *d*) the adoption by the State of a wide policy of helping and supporting co-operative organization, and an adequate provision in budgets for the training of the technical, administrative and book-keeping staffs of co-operative societies and for the Chairs of Co-operation and Thrift.

* * *

3. COLLECTIVE FARMS IN THE PROVINCE OF PARMA. — *Federazione delle cooperative di Parma e provincia, Movimento cooperativo* (Federation of the Co-operative Societies of Parma and the Province. Co-operative Movement), No. 4, 1 November 1917.

Of recent years there have been in the province of Parma a marked diminution of public works and consequently unemployment among the workpeople. To remedy this state of affairs the provincial co-operative societies of consumption and labour have initiated a movement towards agricultural co-operation, creating new organizations which aim at leasing lands and cultivating them on their own account. The agricultural co-operative societies— collective farms — now active are not numerous,

(1) See our issue for November 1915, page 34.

but it should be remembered that this form of co-operation (1) will spread rapidly—because the first experiments have yielded good results, as appears from the following figures which refer to 1916:

	Year of formation	Members	Capital — liras	Hectares (2)	Rent — liras	Revenue — liras
Borgo San Donnino	1906	950	46,373	33.0000	5,000	17,670
Colorno	1912	463	27,854	104.9941	16,756	54,533
Fontanelle	1914	345	15,966	95.5000	14,100	55,543
Ravadesse	1913	28	3,432	89.0000	16,177	57,631
Sissa	1913	131	23,981	106.2824	23,373	94,344
Total	1917		117,606	428.7765	75,406	281,721

On the 11th of last November two other agricultural co-operative societies became active, that of Soragna which was constituted last February and that of Busseto which was constituted last September. The former has leased three properties, having an aggregate area of 148 hectares, for 23,500 liras a year. The other has leased 62 hectares for an annual rent of 15,000 liras.

Further, the co-operative society of Borgo San Donnino has recently enlarged its leasehold by a holding of 33 hectares rented at 4750 liras; and in November 1918 the co-operative society of Fontanella will undertake a new important leasehold of 94 hectares, rented at 21,000 liras. Altogether additions of 337 hectares, rented at 64,250 liras, will bring the total area up to 765.7765 hectares and the total rent to 139,653 liras.

The first experiment in agricultural co-operation is due to the *Casa del Popolo di Borgo San Donnino* (People's House of Borgo San Donnino) which designed to distribute its gains among its members. It is worthy

(1) Besides collective farms, which are one of the most characteristic forms of agricultural co-operation, there also exist and prosper in Italy collective *métayages*. This is to say that vast extents of land, including not only arable and grassland but also woods and vineyards, are cultivated by associations or co-operative societies of labourers who are compensated for their work by receiving half the produce. In the Mantuan province properties have been thus cultivated for some decades; in the province of Modena there are several flourishing examples of them (Carpi, Bomporto, San Prospero, etc.); in the province of Ravenna there is one collective *métayage*, managed by a co-operative labourers' (casual journeymen's) society, which is a model of its kind—that of Massalombardo. Here the gross revenue per hectare is between 5,000 and 7,000 liras. The produce consists of fruit—peaches, pears, apples, green vegetables, grapes, wheat, tobacco, forage and live stock. Two facts suffice to show the social and economic importance acquired by collective *métayages*. The small labourers' co-operative *métayage* of Cibeno di Carpi easily provides a sufficient livelihood for the seven families of its members although previously the land supported only the family of one farmer. The society of San Lorenzo della Poppa farms on this system 40 hectares on which work the able-bodied members of quite 32 families. See in this connection *La Cooperazione Agricola*, Bologna, No. 2, 25 September 1917.

(2) 1 hectare = 2.47 hectares.

of note that the yield of the small farm leased was almost tripled in ten years, and that while the previous single lessee had barely supported a single peasant's family the co-operative society maintains on the farm in better conditions three families. It should also be noticed that when the lease fell in the rent was doubled, and that the value of the farm has much increased by the co-operative society's enlightened cultivation, the philanthropic body which let it thus deriving much benefit. In confirmation of this there is an interesting passage in the report of the deliberations of the civil hospitals of Borgo San Donnino as to the concession of a second farm: "Seeing that the intervention of the co-operative society has already markedly raised the rent, that as lessee of other farms the co-operative society has proved itself to be a stranger to speculative aims, and to care for the improvement of such farms and of the condition of labourers, and that therefore the lower price which the administration will receive will be amply compensated for by the improved state of the farm when the lease falls in... the administration resolves by an unanimous vote to grant the lease to the co-operative society rather than to any individual".

Another flourishing collective farm is that of Ravadese which obtained in 1913 the lease of two holdings and "healed the wound of unemployment" in that it ensured continuous and remunerative work to some thirty families (1). After the sacrifices of the first two years, and the expensive works and organization which were absolutely necessary to these two farms, the society "is now in such an excellent position that it is sure of a prosperous and fruitful life".

The facts that have been given are enough to show all the importance which the movement represented by the collective farms is destined to acquire in the province of Parma.

* * *

4. AN IMPORTANT MEETING OF AGRICULTURAL CO-OPERATIVE SOCIETIES.

— *La Cooperazione Italiana*, Milan, No. 1269, 9 November 1917.

On the 28th of last October there was held at Milan an important meeting of representatives of all the agricultural co-operative societies and of many co-operative societies of labour and consumption in the province (2).

(1) See the interesting pamphlet of ANTONIO BIZZOZERO, *Le affittanze collettive per assicurare il pane e il lavoro agli umili* (Collective Farms for Ensuring Bread and Labour to the Poor). Unione delle Cattedre Ambulanti di Agricoltura Italiane. Opuscoli di propaganda. No. 1, Tip. Pelati, 1917.

(2) Shortly before, on 9 September, another meeting was held of co-operative consumers and agricultural societies of the provinces of Bari, Foggia, Lecce and Potenza, at the *Istituto Nazionale di Credito per la Cooperazione*. It was resolved, among other things, legally to constitute a federation of co-operative consumers' societies which should have its seat at Bari and should aim at acquiring the goods needed by the federated societies and giving them necessary help. Where agricultural co-operative societies were concerned, the meeting dealt with the relations to be established with sister societies in the north of Italy for the exchange of agricultural produce. See in this connection *La Cooperazione Agricola*, Bologna, No. 2, 25 September 1917.

to consider some questions specially interesting to co-operative societies. The position of the co-operative movement in this province was shown by a detailed report, from which the following figures, having reference to 31 December 1916, emerge: 33 co-operative consumers' societies had 4628 members, and a paid-up capital of 245,000 liras, and had made sales for 1,632,854 liras, a sum estimated to have risen to 3,000,000 liras in 1917; 27 co-operative societies of production and labour had 2675 members, and a capital of 318,280 liras, and had done work worth 1,177,174 liras; five agricultural co-operative societies had 1917 members who farmed 428.7765 hectares, rented in the aggregate at 75,406 liras, and the harvests brought in to them 281,723.15 liras.

There was discussion as to action to be taken in connection with religious and public bodies to obtain leases of their lands for the co-operative societies. The matter was dealt with by Signor G. Faraboli who by means of facts — in particular a comparison between the production of two farms, in the same district and of almost equal extent, of which one was let to a co-operative society and the other to an individual — brought into relief the desirability of choosing co-operative societies as tenants of public bodies. A resolution embodying this conclusion was adopted.

The matter of "legislation in favour of agricultural co-operation" was dealt with by the Hon. M. Samoggia, who justified a resolution which claimed for associated labourers, a preference, analogous to that already given in the case of public contracts, when leases of the lands of public bodies were granted. He asked that the laws governing contracts of leases and agricultural contracts in general should be equal. Finally a vote was passed in favour of the wished-for constitution of a provincial federation of Parmesan co-operative agricultural societies, and of the complete solution of the problem of society insurance.

* * *

5. A CO-OPERATIVE ASSOCIATION AMONG OWNERS AND USUFRUCTORIES OF WOODS. — By-laws of the "Società toscana per l'industria dei boschi" (*Tuscan Society for the Forest Industry*), Florence, 1917.

This society was constituted at Florence on 20 July 117. It aims at selling woodland products in common, opening magazines for selling them, making advances on them to members or obtaining such for members, planting nurseries for reafforestation, and constituting an office for technical advice on forestry and the valuation of products, and an office for legal consultations on the application of forest laws and rules. It further proposes to work up and convert forest products. It is the business of the council of administration to establish the criteria for and the limits of such aims of the society. The following classes of persons may be members: a) owners, occupiers and administrators of woodlands; b) all persons in a position usefully to forward the society's aims, including corporations and societies having analogous aims. The society's capital is formed of: 1) shares subscribed by the members, each of the nominal value of 100 liras,

to be paid-up entirely in one instalment on a simple application from the administrative council and on terms established by the latter ; 2) the admission fee of 10 liras ; c) the ordinary and extraordinary reserve ; d) the income derived from the members' shares.

Rules for the sale in common of members' woodland products are appropriately established. The technical management of the society is entrusted to a director. The society will not begin to be active until its capital in shares has reached the sum of 10,000 liras.

* * *

6. THE "FEDERAZIONE APISTICA SUBALPINA" (*Sub-Alpine Bee-Keeping Federation*)
— *Credito e Cooperazione*, Rome, No. 18, 15 September 1917.

This federation, which has had a *de facto* existence since 25 November 1914, recently acquired legal form at Turin, becoming a limited liability co-operative society. It aims principally at the progress and popularization of scientific agriculture, the improvement of its members as bee-keepers, the collective acquisition and use of the requisites of this industry, and the sale of produce. The charter indicates the various modes of pursuing these ends, and facilitates such pursuit by instituting regional delegations and amply providing in every way for the better and more profitable management of apiaries.

SWITZERLAND.

THE SWISS UNION OF RAIFFEISEN FUNDS (*Union Suisse des caisses Raiffeisen*) in 1916. — *Journal d'agriculture suisse*, 39th year, No. 45, 6 November 1917

The number of funds belonging to this union had risen at the end of December 1916 to 199. In the figures on the report it is given as 195, and the number of members as 13,867. The progress made is remarkable for in 1903, that is fourteen years ago, the number of affiliated societies was only 25 and they comprised 1,740 members. In 1910 there were 139 funds having 9,402 members. German Switzerland contributed to the union 12 new funds in 1916 and Romanic Switzerland 4.

In German Switzerland the canton of Friburg is represented in the union by 28 new funds, Vaud by 19 and Valais by 17. The cantons of Neuchâtel and Geneva do not participate in it. The union's report gives the number of the Federated funds which are really Romanic as 50. The others belong to German Switzerland.

The total turnover which was 20,000,000 francs in 1915 reached 37,000,000 francs in 1916. The available resources of the affiliated funds were increased by about a million francs, and term deposits repayable after notice given were increased by about 1,100,000 francs. Current debit accounts diminished by 25,000 francs and amounted to 1,240,000 francs.

The profit and loss account showed, in spite of the importance of bu-

business, a profit of only 19,366 francs. The union's true aim was however fully reached. The society does not aim at making profits for itself, but provides the federated funds with a possibility of mutual compensation, supervises their management by means of regular revisions, and offers them an opportunity for a safe investment of their available capital.

The modest balance was employed as follows :

4 per cent. to the quota of affairs	13,680 francs
To the reserve fund	5,500 "
Carried over to next year	186 "
	<hr/>
	19,366 "

During 1916 the union did not have to modify its previous dispositions as to rate of interest. It was $4\frac{1}{2}$ per cent. for current credit accounts, $4\frac{1}{2}$ per cent. for deposits bound for three months, and $4\frac{3}{4}$ per cent. for deposits bound for one year. Current debit accounts will pay interest at the rate of 5 per cent.

UNITED STATES

1. THE FEDERAL LAND BANK OF BERKELEY, CALIFORNIA, AND LOANS ON ORCHARDS. — *California Fruit News*, Vol. 36, No. 1529, San Francisco, 27 October 1917.

We have already explained that the activity of the Federal Land Banks, constituted in accordance with the law of 17 July 1917, while it follows uniform principles yet adapts itself to special conditions in the several groups of States. The greater or less success of the Act depends on the degree of perfection with which this adaptation is made. The Federal Land Bank of Berkeley, California, has issued the following statement of the principles on which it will make loans on orchards :

" 1. Class A Orchard Definition. Proven adaptable land with valid and sufficient water supply which could be profitably used for crops other than orchards. Trees not exceeding twenty years of age and to be in full bearing, free from disease, and which have a record of better than average crops over a period of not less than five years.

" 2. Where a loan is desired on a parcel of land less than five acres in area, it must be demonstrated to the satisfaction of the bank that such land constitutes an actual farm and that its products provide the applicant's principal source of income. Otherwise no loan can be made.

" 3. Upon lands which have no substantial agricultural value except for orchards no loans will be made.

" 4. Upon young groves not yet in full bearing loans will be based on the land as to its adaptability for other agricultural crops, plus a reasonable consideration on the cost of the planting and the age of the trees.

" 5. On other than young orchards trees will not be regarded as a basis for enhancing the basic agricultural value of the land, unless satisfactory

profits, evidenced preferably by packing-house returns for a series of years, can be shown.

" 6 Where loans are based on high value — such as a class A orchard land — the term of the loan will be related to the age of the orchard and its proven productivity. Where high productivity is shown it must be assumed that borrowers will be willing and able to meet the increased payments of shorter termed loans. On such land the term of the loan will be limited to fifteen years.

" 7. Upon orchards while not considered as class A but which show average profit returns, reasonable consideration will be given as to the enhancement of the general value of the land, provided such land meets the proper requirements as to its adaptability for other agricultural crops.

" 8. No loans exceeding \$400 an acre will be made. This is subject to the approval of the full board of directors of the Federal Land Bank of Berkeley "

* * *

2. A CO-OPERATIVE CHEESE MANUFACTURING AND MARKETING ASSOCIATION IN TILLAMOOK COUNTY IN OREGON. — MACPHERSON (Hector) and KERR (W. H.) in *Yearbook of the United States Department of Agriculture* 1916, Washington, 1917.

A survey of the cheese industry in Tillamook County, Oregon, shows the importance of proper methods of marketing for the stimulation of production, and the benefits of concentrated effort. Among the achievements of the Tillamook County Creamery Association are the standardization of the products of its member factories and the elimination of unequal competition where production and prices are concerned. A study of the methods it has employed is valuable.

Agricultural Conditions. — Tillamook County lies near the north-west corner of the State of Oregon between the Coast Range and the Pacific Ocean. The climate is mild; and the abundant winter rains and cool, clear summer weather produce rich green pasturage almost all the year round. Such conditions make it possible for farmers to obtain large yields of milk without spending much on labour or fodder.

A small dairy farm in the county, typical of the best of its kind, has been surveyed. Its 53 acres of cleared river-bottom land were valued at \$400 an acre in 1914, when \$7,000 had been invested in improvements, including the dwelling-house, barn and all outhouses. The total investment in the farm was \$32,729, and included \$2,390 spent on live stock, \$1,700 as the value of a motor-car and \$500 as the value of machinery. In 1914 the farm supported 35 dairy cows valued at \$60 each, 6 yearling heifers valued at \$25 each and a Jersey bull valued at \$75. One horse was kept and used to draw the milk to the factory. The fifty chickens were kept almost solely for the needs of home consumption. In 1914 the milk sold produced 9,411.36 pounds of fat and gave a gross income of \$3,576.32. The expenses for the year were \$923.90, which, when subtracted from the gross income, left \$2,676.10 as interest on the investment and return for

the owner's labour. If interest on the investment be calculated at the rate of 7 per cent. the return for the owner's labour was \$380.80.

Development of the Industry. — The first white settler reached Tillamook County on the first day of April 1851. The rich prairie and bottom lands soon attracted the stockman, whose herds usurped the dominion of the deer, the bear and the mountain lion. As the settlement grew the fertile soil and rich pastures bade for more complete utilization. The first serious attempt at scientific dairy-farming in the district was not however made until 1890. Three years later the first farmers' creamery in the county, the Tillamook Dairy Association, was established. The factory was completed in the spring of 1893 and worked as a butter factory in its first season. Earlier in the same year a privately owned creamery was established in the county, and this in the following spring became the first cheese factory of Tillamook County. In 1899 there were in the county eight privately owned cheese factories, producing altogether about a million pounds of cheese a year, and four large creameries having an annual output of about 350,000 pounds of butter. Cheese proved to be better adapted than butter to the prevalent uncertain means of transport, and therefore the cheese factories increased rapidly until in 1902 about forty of them were active in the county, half of them being very small and handling only the milk of from one to three farms.

In 1899 the Tillamook Dairy Association, a co-operative society, was formed at Fairview. By the end of its second year of existence it had begun to succeed, and its success led to the establishment of other local farmers' creameries. The co-operative movement has since made such progress that out of 23 cheese factories now in the county only two are owned privately. A few farmers still make their own cheese, but most of the small factories have ceased to exist, and their place has been taken by others which are larger and more economically managed and are owned and controlled by co-operative farmers.

Organization of Co-operative Cheese Factories. — Although most of the factories are co-operative all of them are organized under the Oregon corporation law. The plan of organization is simple. A few of the farmers most interested make an inventory of the dairy-farming assets in the neighbourhood, taking into account the number of cows, pasturage and conditions as to crops, and thereafter they decide whether or not the district can support a cheese factory. If their decision be affirmative a company is incorporated with sufficient capital to provide a factory adequate to the supply of milk. Co-operation between banks and farmers' companies in Tillamook County has been in a great measure responsible for the success of many of these companies in the early stages of their existence, for funds have thus been provided at low rates of interest and for long periods. In most cases the security has been in the form of a joint note of the members, but sometimes the note of the association, signed by the board of directors, has been sufficient.

The management of these factories is vested in boards of from three to five directors. The board elects from its number a president, who is

the association's legal head, and also appoints a secretary and a treasurer. In most Tillamook creameries the two latter important officers are not members of the boards. To cover working expenses a flat rate per pound is charged for manufacturing cheese, normally $1\frac{3}{4}$ cents. In large factories this price is enough to meet all charges, including the making, hauling and inspection of the cheeses, entrance charges, insurance, the cost of marketing and the annual addition to the sinking fund, and further provides for the accumulation of a considerable surplus. Since in most cases these factories are not true co-operative associations but rather farmers' stock corporations, this surplus is sometimes distributed only to the small number of suppliers of milk who are also stockholders. Associations managed on such lines have been known to pay dividends of as much as 100 per cent. on their capital stock. Such a proceeding sometimes leads to discontent among suppliers of milk who have not benefited by the distribution of surplus. Where factories are conducted on a strictly co-operative basis the plan is to pay a liberal rate of interest on the capital invested, the remaining surplus being distributed among suppliers in proportion to the amount of milk they have contributed during the year. One factory thus distributed a surplus by paying 10 per cent. on capital stock and 2 cents for every hundred pounds of milk delivered at the factory.

Central Marketing. — Before 1904 the factories, owing to their lack of facilities for storage, were obliged to send their cheese to commission houses in the large towns on the Pacific coast. The depression in price which followed was maintained until the season of low production came in the autumn, when the dealers who had stored the cheese during the summer made great profits. The producers however received in such conditions unsatisfactory prices; and consequently the various factories in the county united in order to attempt to market their cheese in common, and to provide in common the storage capacity which would enable the excess product of the summer to be kept until the better selling season. The efficiency of the co-operative plan of consolidated buying and marketing at once began to have its effect on privately owned factories, several of which went into bankruptcy or sold out between 1904 and 1906. The new plan secured better prices, brought greater returns to the farmers, and stimulated milk production on all the farms which had previously supplied these factories. This gave a great impetus to the co-operative movement: in the spring of 1909 the co-operative selling agency was handling the output of sixteen large factories and three private farm factories. The co-operative plan of selling brought about the establishment of a central office supervised by a secretary-salesman who kept in touch with all the markets and arranged the sale of the entire output of the member factories. The increase in this office's business caused the adoption of excellent accounting methods, which not only facilitated sales but also improved the quality of output. By having only one salesman to handle 90 per cent. of the county's output the Tillamook factories have been able to get for their cheeses better prices, determined by the prices on Eastern markets. Bad debts have been reduced to the minimum, the entire loss from them in the last ten years amounting to

less than \$ 500, or only $\frac{1}{100}$ per cent. of the value of sales in the same period — \$ 3,000,000. The terms of sales stipulate for payments in cash within thirty days. The regularity of such payments for cheese allows the suppliers of milk to be paid regularly. Punctual payment is no small factor in the success of any farmers' marketing association.

The Tillamook County Creamery Association. — The gravest problem was that of securing the uniform quality of the cheese produced by the several factories. At first the cheese was consigned for sale as it came from the factories, and the makers mixed good with bad and brought the whole output into disrepute. A meeting of the factories selling through one salesman was called, and resulted in the organization of the Tillamook County Creamery Association, which became active in 1909 when its membership included nine of the largest factories. According to its by-laws its objects were in part : " To bring the producers of the different creameries in Tillamook County together and maintain just and cordial relations among them, and by co-operation to advance their common interests ; to foster and encourage domestic and foreign trade pertaining to the farming interests of Tillamook County and to acquire and disseminate valuable business information ; and to adjust controversies between its members and generally to secure to its members the benefits of co-operation in the furtherance of their legitimate pursuits ".

The association has instituted an inspector who visits each of its factories regularly and has improved the quality of the milk of the associated factories and increased the quantity of cheese obtained therefrom. Under his direction inefficient workmen have been removed and cheesemaking methods have been improved in all the factories. The average yield of cheese per hundred pounds of milk increased from 10.7 pounds in 1909 to 11.12 pounds in 1914. The association now includes eighteen factories each of which the inspector visits once a week. He tests one cheese out of each vat produced : if it conform to the standard set by the association, and not otherwise, the boxes containing the cheese are stamped with the words, " Inspected by Tillamook County Creamery Association ".

The association concentrates the control of its business and marketing in the hands of a secretary-salesman. The books of record necessary to tabulating and accounting for the business of the several factories are kept under his direction in the central office. As the milk is received at the factories each morning the cheesemakers enter receipts for it on tally sheets, there being one sheet for each supplier. At the beginning and middle of the month composite tests are made of each supplier's milk. At the end of the month the tally sheets are summarized in a monthly report showing for each supplier the total amount of his milk and the results of the tests thereof. This monthly report is sent to the secretary-salesman's office, where it is used as a basis for the suppliers' monthly statements. Each cheesemaker is further required to show in a weekly report to the secretary-salesman the total amount of milk he receives and the number of cheeses he makes on each day of the week. The inspector supplements these reports by daily reports of the number of cheeses of each variety inspected and the number

duly stamped in every factory. From the inspector's reports the secretary-salesman can keep an accurate account of the number of cheeses of each kind ready for the market at all times. In consequence cheeses of the various kinds can be manufactured to meet the varying demand.

The accounts kept in the central office show the value of the milk contributed by each supplier, calculated according to its weight or its content of butterfat. This value is credited to the supplier's account, and he receives at the end of the month a cheque for its amount, less any deductions. There is a simple system of keeping an accurate account of all costs.

The following table shows the importance and growth of the production of cheese in Tillamook county from 1908- to 1914 :

Year	Quantity of milk handled	Quantity of cheese made	Value of cheese made	Quantity of cheese obtained per 100 lbs. of milk
	lbs.	lbs.	\$	lbs.
1908	—	2,073,390	259,355.29	—
1909	23,416,524	2,506,612	386,135.81	10.70
1910	23,639,664	2,541,057	400,044.84	10.75
1911	24,131,802	2,619,229	358,206.29	10.85
1912	29,139,514	3,211,004	524,718.61	11.02
1913	31,566,888	3,505,316	541,748.46	11.10
1914	33,202,516	3,694,458	568,395.53	11.12
Total . . .	—	20,151,266	3,038,604.83	—

Part II: Insurance and Thrift

SWITZERLAND.

AGRICULTURAL INSURANCE IN 1915.

OFFICIAL SOURCE:

RAPPORT DU BUREAU SUISSE DES ASSURANCES SUR LES ENTREPRISES PRIVÉES EN MATIÈRE D'ASSURANCE EN SUISSE EN 1915 (*Report of the Swiss Office of Insurance on Private Insuring Enterprises in Switzerland in 1915*). Published in accordance with the resolution of the Swiss Federal Council on 13 August 1917. 30th year. A. Francke, Berne, 1917.

The federal report on private insuring enterprises in Switzerland in 1915 is the thirtieth of its kind. It concerns life insurance and insurance against accidents, fires, etc, as well as agricultural insurance, insurance against mortality among live stock and against losses occasioned by hail. Insurance of this last kind is organized in Switzerland only by private companies, while the insurance of live stock is undertaken by private enterprises and by public cantonal institutions with which, in the case of some cantons, owners are compelled by the law to insure their live stock. Where the two latter kinds of agricultural insurance are concerned the private companies have completely the legal form of mutual societies.

As in previous years (1) we will deal with agricultural insurance in Switzerland on the basis of the data and indications supplied by this publication of the Federal Office of Insurance. We will thus obtain an idea of the position of insurance of this kind in 1915.

§ I. INSURANCE AGAINST MORTALITY AMONG LIVE STOCK.

Three mutual societies — *La mutuelle chevaline suisse* of Lausanne, the *Badische Pferde-Versicherungs-Anstalt a. G.* of Carlsruhe and the *Garantie fédérale* of Paris — and one stock company — the *Perleberger Versicherungs-*

(1) See our issue (*Monthly Bulletin of Economic and Social Intelligence*) for August 1913 and our issues for December 1914 and November 1915.

Aktien-Gesellschaft of Perleberg in Prussia — practised insurance against mortality among live stock in Switzerland in 1915. The two former insured only horses while the last named also assumed the risks of cattle.

We noticed in our October number that the war had reacted strongly on insurance against mortality among live stock. The insurance of horses has suffered especially. The importation of horses has almost ceased. The important gaps which have been produced in the available stock of horses have been impossible to fill owing to the high prices on the market. A diminution of the sums insured and the premiums received has ensued necessarily. All the companies have felt the influence of the state of affairs: one of them was affected to a degree which obliged it in 1915 to give up insuring butchers' live stock. We should add that casualties for which indemnities had to be paid diminished in 1915 but the ratio in which they stood to the premiums received increased perceptibly none the less. This is due to the fact that the quantity of the forage used to feed the live stock has been lowered since the outbreak of war. The more intensive use of the animals has certainly contributed to the same result.

The development of insurance against mortality among live stock in Switzerland from 1912 to 1915 was as follows:

Year	Sums insured — francs	Premiums — francs	Casualties	
			Amount — francs	% of premiums —
1912	16,102,975	635,972	482,214	75.8
1913	17,573,550	638,318	541,145	84.8
1914	19,540,527	608,295	486,023	79.9
1915	13,282,799	519,364	481,580	92.7

As regards financial results obtained by these societies in 1915 we will report here only the data referring to the business accomplished in Switzerland. To make these results clearer we will resume those concerning Switzerland only from 1912 to 1915.

The *Mutuelle Chevaline Suisse* has been able to pay 75 per cent. of the estimated value of their losses to those insuring with it. As is known, the insured person insures 75 per cent. of the estimated value of his insured horses — in other words one fourth of the animals' value is not insured at all. For the first time since this society was founded in 1901 it has been obliged to apply article 16 of its by-laws and exact from its members an additional premium in order to pay for the losses of the current year. This extraordinary contribution was fixed by the administrative council at 30 per cent. of the normal premium, and it sufficed to cover the excess of the expenditure of the year which reached 57,929.10 francs.

The fundamental data for the period from 1912 to 1915 are as follows :

Year	Number of horses insured	Sums insured francs	Premiums received francs	Losses indemnified francs
1912	7277	7,138,880	226,846	201,082
1913	7644	7,505,335	241,129	225,105
1914	7215	7,075,835	240,876	230,274
1915	6853	6,791,110	221,605	238,148

Costs of administration represented the following percentages of premiums received.

1912	1913	1914	1915
Percent.	Percent.	Percent.	Percent.
20.3	20.1	19.0	18.5

The *Badische Pferdeversicherungs-Anstalt* was able to dispense in 1915, as in the seventeen previous years, with a levy from its insured of a supplementary premium. In accordance with its by-laws this society was able to pay into its reserve fund a sum of 30,413.81 francs as against 34,712.70 francs in 1914. Its accounts closed with a profit of 153,167.32 francs, which sum also was paid into the reserve fund. Such profit was largely due to a diminution of the reserve of current premiums.

As compared with the previous year the chief department — insurance of members — showed a diminution at the end of 1915 of 3,031 members, 2,601 horses and 1,147,000 francs of insured capital.

The books showed the following results :

End of year	Members	Insured horses	Sums insured francs
1912	14,885	21,481	23,584,041
1913	15,251	21,956	24,336,610
1914	14,227	13,653	15,381,183
1915	11,196	11,052	14,234,183

The costs of administration were a little higher than in previous years. They constituted the following percentages of premiums received.

1912	1913	1914	1915
Percent.	Percent.	Percent.	Percent.
19.0	19.4	21.2	23.4

Among the causes of the particularly high losses were strangles and contagious anaemia. Hoof and leg diseases, on the other hand, and cases of the condemnation of unfit animals remained below the average. The

latter circumstance may perhaps be explained by the fact that many animals which would in normal times have been condemned and for which an indemnity would have been paid are in use to-day.

The development of this society's *Swiss* business in the last four years is shown by the following figures.

	Insured sums francs	Premiums francs	Losses francs
1912	2,768,073	136,025	122,584
1913	2,605,470	137,385	127,260
1914	2,450,782	129,447	98,562
1915	2,270,044	117,603	100,870

The *Perleberger Versicherungs A. G.* began to practise the insurance of butchers' live stock in Switzerland in 1913. As a stock company it insures only for fixed premiums and excludes all supplementary contributions from the insured. This company's progress has been satisfactory. The total sum of its insurance had slightly diminished in 1914, but rose again until it surpassed its amount in 1913. The sums insured have been as follows :

in 1913	378,784,142	francs
in 1914	377,436,166	"
in 1915	379,322,664	"

The annual accounts showed a profit of 461,276.87 francs as against 256,609.03 francs in 1914, and allowed the distribution of a 10 per cent. dividend as in the previous year. Further 197,199.74 francs were paid into the reserve for eventualities arising out of the war.

The company concluded no fresh insurance in Switzerland in 1914. Its Swiss business in the two previous years is represented by the following figures :

Year	Sums insured francs	Premiums received francs	Losses indemnified francs
1913	1,659,800	4,900	5,286
1914	5,297,190	30,409	32,348

As regards the *Garantie fédérale* the tables annexed to the report of the Federal Office of Insurance contains data, having reference to Switzerland only, with regard to the sums insured which amounted to 4,221,645 francs. Its profit and loss account refers to the total business concluded by this company even outside Switzerland, and the figures on this account showing the premiums received and the losses indemnified refer to the company's general business. The net indemnities which it paid in Switzerland.

expressed in terms of percentages of the values of the animals suffering casualties, were as follows :

1914		1915		
56 per cent	60 per cent.	60 per cent.	60 per cent.	
60 " "	80 " "	80 " "	80 " "	in the case of horses " " " " cattle.

*
* *

To give a complete picture of the present position of insurance against mortality among live stock in Switzerland we must also notice the numerous societies which practise insurance and are not subject to the Confederation's control. They exist in almost all the cantons. We should recall moreover that by the federal law of 22 December 1893, which concerns the improvement of agriculture by the Confederation, when a canton or an association of owners of live stock decides that insurance shall be compulsorily organized on a determined territory within a commune, a district or a canton, the Confederation makes, by the medium of the cantons, grants equal to those which the cantons themselves make to local funds. The grants have been somewhat limited as a result of the application of the decree of the Federal Council of 30 October 1914 on fixing federal subventions favouring the insurance of live stock. They have been reduced to 1 franc per head of cattle insured and 40 centimes per head of small live stock. Such grants have been made by seventeen cantons and half cantons. In consequence of the application of the federal decree of 30 October 1914 federal grants were diminished in 1914 by 80,000 francs as compared with 1913, and in 1915 by 292,695 francs as compared with 1914. This measure has a purely economic character and aimed at reducing the budget expenditure.

In 1915 the Confederation made on an average a grant of 0.97 franc per head of large live stock insured and 0.36 franc per head of goats or small live stock. Thus the average grant was 0.95 franc per head of live stock ; and the total expenditure was 791,347 francs as against 1,004,684 francs in 1914. The cantons paid in grants in 1915 a sum of 1,021,869 francs or 1.23 francs per head of live stock insured.

In the following table we give some representative data as to the grants made to insurance against mortality among live stock from 1913 to 1915 :

Year	Animals insured	Number of casualties	Indemnities		Grants cantonal		Grants federal credit of 1915
			total	per casualty	total	per head of live stock	
			frances	frances	frances	frances	
1913. . .	873,033	27,875	4,314,147	154.77	1,084,042	1.24	1,084,042
1914. . .	916,909	28,729	4,274,994	148.80	1,104,032	1.20	1,004,684
1915. . .	831,067	26,755	3,521,621	127.89	1,021,869	1.23	791,347

§ 2. INSURANCE AGAINST HAIL.

As in preceding years insurance against hail was practised in Switzerland in 1915 only by two companies — the *Société Suisse d'assurance contre la grêle* which has its headquarters at Zurich and *Le Paragrêle* of Neuchâtel. The former company is active throughout the territory of the Confederation and insures agricultural produce of all kinds against the risk of hail; the latter is active only in Neuchâtel and assumes only the risks of vineyards.

In 1915 it was matter for regret that there were numerous and very frequent falls of hail in Switzerland. The *Annales de l'Office central suisse de météorologie pour 1915* (Zurich) record forty-five days in which heavy falls of hail affected 921 communes and 372 districts, leaving out of account the hail-storms which had local effects, affecting only one or two communes, and which were distributed over twenty-seven days and wrought damage in forty-two communes. We give the dates of the worst falls with the numbers of communes they affected.

7 June	71 communes	1 August	102 communes
8 " "	54 " "	17 " "	78 " "
13 July	54 " "		

In the four years from 1912 to 1915 the *Société suisse d'assurance contre la grêle* registered as follows:

1912	1913	1914	1915
44	60	49	59 days of hail
5816	7715	5293	8816 declarations of losses.

Le Paragrêle, on the other hand, registered in 1915 only a single day of hail — 2 August — on which the fall did little damage. The two companies obtained different financial results. For *Le Paragrêle* 1915 was an excellent year but the *Société suisse* closed its balance-sheet showing a deficit.

In 1915 the latter company concluded 1980 more insurances than in 1914 when it registered 3,490 such contracts. The sums insured increased by 9,605,950 francs, having amounted to 9,692,050 francs in 1914. The sum of the premiums received, on the other hand, diminished by 5,990.90 francs, whereas in 1914 it had increased by 254,256.90 francs. The cause of the diminution of receipts under this head is largely that the rebate of premiums due from those of the insured who had suffered no loss from hail during the last three years was raised from 10 to 20 per cent.

The sum of the indemnities paid by this company in 1915 was almost three times as large as the corresponding sum in 1914. The actual amounts were 507,492 francs in 1914 and 1,392,482 francs in 1915. The latter sum has been surpassed only in 1911 which was distinguished by many storms. The amount of the premiums in 1915 was insufficient to cover that of

the indemnities, there being a deficit of 305,661.51 francs which was met by drawings on the reserve fund. Interest was however paid on the latter account, and thus the reserve fund was diminished only by 116,921.57 francs and still stood at 4,490,822.32 francs at the end of 1915. This time it was again necessary to have recourse to a supplementary premium.

To allow a better comparative examination we give in the tables on pages 32 and 33 the results obtained by the *Société suisse d'assurance contre la grêle* from its foundation in 1880 until 1915.

A comparison of the most interesting figures in these tables for the years 1914 and 1915 gives the following :

	1914	1915
Number of policies	66,897	68,877
	francs	francs
Insured capital	80,865,170	90,471,120
Premiums received	1,304,086	1,298,096
Losses indemnified	507,492	1,392,482
Reserve fund	4,607,744	4,490,822

In the case of *Le Paragrêle* the figures showing the number of policies, the insured sum and the amount of premiums are much the same for 1914 and for 1915. This company had in 1915 to pay only one small indemnity of 316 francs, and therefore could pay a sum of 33,000 francs, as against one of 9,000 francs in 1914, into its reserve fund which amounted at the end of 1915 to 108,750 francs.

The following is a comparison of the most interesting figures supplied by this company for 1914 and for 1915 :

	1914	1915
Number of policies	535	528
	francs	francs
Insured capital	560,744	565,991
Premiums received	33,731	34,007
Losses indemnified	23,631	316
Reserve fund	75,750	108,750

The indemnities paid by the two companies from 1912 to 1915, expressed in terms of percentages of the sums insured, were as follows :

	1912	1913	1914	1915
<i>Société Suisse</i>	0.8 %	1.1 %	0.6 %	1.5 %
<i>Le Paragrêle</i>	0.6 %	20.1 %	4.2 %	0.1 %

Costs of administration did not exceed a normal rate. For the *Société suisse* they were a little higher than in 1914, for *Le Paragrêle* a little lower. Expressed as percentages of the premiums received they were as follows :

	1912	1913	1914	1915
<i>Société Suisse</i>	14.6	17.3	14.8	16.1
<i>Le Paragrêle</i>	12.9	11.1	13.5	11.8

Results obtained by the "Société Suisse d'assurance contre la grêle" since its foundation.

I Profit and Loss Account from 1880 to 1915.

Year	Receipts			Expenditure			
	Premiums	Net supplementary premiums	Other receipts Interest on capital etc.	Total receipts	Indemnities	Cost of administration and taxes	Profits
	fr.	fr.	fr.	fr.	fr.	fr.	fr.
1880-1889	1,274,739.40	490,712.80	61,162.14	1,826,614.43	1,408,799.35	390,944.95	175,564.39
1890	205,273.40	—	3,892.50	209,165.90	129,507.30	40,676.87	38,981.73
1891	282,128.30	—	3,515.61	285,643.91	203,103.60	51,456.80	31,083.51
1892	347,322.90	—	5,193.31	352,516.21	172,704.53	56,217.72	123,593.96
1893	456,600.40	—	10,540.04	467,140.44	173,729.85	63,182.86	230,227.73
1894	567,600.65	—	14,232.51	581,833.16	510,521.90	71,178.47	187.79
1895	582,647.70	—	20,672.46	603,320.16	451,237.10	78,245.47	64,837.59
1896	716,068	—	24,928.61	740,996.61	628,278.60	110,237.85	2,480.13
1897	703,220.10	—	23,649.36	726,869.46	595,963.20	101,372.96	29,533.30
1898	846,957.50	—	31,044.68	877,102.18	455,892.60	114,077.05	307,132.53
1899	723,632	—	33,072.20	756,704.20	105,060.10	105,520.14	546,123.96
1900	762,760.30	—	54,314.67	817,074.97	576,295.10	113,447.18	127,332.69
1901	701,598.60	—	65,749.26	767,347.86	580,703.80	120,054.2	66,589.85
1902	675,014.90	—	64,236.25	739,251.15	649,812.20	115,462.0	—
1903	808,505.80	—	77,026.31	885,532.11	389,911.30	112,387	372,882.11
1904	844,524.80	—	78,803.28	923,328.08	556,248.70	129,237.0	237,842.30
1905	879,950.20	—	96,586.03	976,536.23	684,836.60	133,955.20	157,744.43
1906	930,054.10	—	104,312.19	1,034,366.59	308,363.70	125,961.0	600,041.87
1907	879,175.90	—	112,560.57	991,736.47	1,001,745.20	154,890.27	164,899
1908	1,036,388.10	—	115,789.04	1,152,177.14	903,925.20	179,507.67	68,944.27
1909	961,490.80	—	120,003.07	1,081,493.87	310,167.30	147,429.52	623,897.05
1910	1,060,003	—	149,114.40	1,209,117.40	1,104,378.10	193,645.31	—
1911	1,138,311.80	—	140,394.42	1,278,706.22	1,419,553.10	200,724.81	88,306.01
1912	1,353,783.60	—	133,159.19	1,486,942.79	650,840.80	197,112.9	638,980.05
1913	1,049,823.70	—	158,110.25	1,207,933.95	781,684.70	178,255.79	247,993.46
1914	1,304,886.40	—	171,841.02	1,475,927.42	597,492	193,201.11	775,234.31
1915	1,298,095.50	—	188,739.94	1,486,835.44	1,392,481.90	211,275.11	116,921.57
Total	22,389,718.24	490,712.80	2,052,643.31	24,933,074.35	16,653,242.83	3,699,009.20	5,467,238.01
	22,880,431.04				% of premiums 72.8	% of premiums 16.2	Profit: 4,580,822.32

Results obtained by the "Société Suisse d'assurance contre la grêle" since its foundation.

Proportion of receipts and expenditure to sum insured.

Year	Number of policies	Sum insured	Receipts				Expenditure			
			Premiums	Supplementary premiums	Various	Total	Indemnities	Cost of administration and taxes	Profits	Losses
fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
1880-1889	68,633	81,904,741	1.56	0.60	0.07	2.23	1.72	0.48	0.21	0.18
1890	10,294	11,461,490	1.79	—	0.03	1.82	1.13	0.35	0.34	—
1891	16,985	16,857,070	1.67	—	0.02	1.69	1.20	0.31	0.18	—
1892	22,220	20,479,340	1.69	—	0.03	1.72	0.85	0.27	0.60	—
1893	26,673	23,766,350	1.92	—	0.04	1.96	0.73	0.27	0.96	—
1894	31,140	29,280,050	1.94	—	0.05	1.99	1.74	0.24	0.00	—
1895	33,681	29,231,790	1.99	—	0.07	2.06	1.54	0.30	0.22	—
1896	37,404	33,725,790	2.12	—	0.08	2.20	1.86	0.33	0.01	—
1897	38,522	33,123,910	2.12	—	0.07	2.19	1.80	0.30	0.09	—
1898	42,597	38,767,300	2.18	—	0.08	2.26	1.17	0.29	0.80	—
1899	42,578	6,452,820	1.98	—	0.09	2.07	0.29	0.29	1.49	—
1900	43,397	37,841,500	2.01	—	0.14	2.15	1.52	0.30	0.33	—
1901	43,273	37,249,900	1.88	—	0.18	2.06	1.56	0.32	0.18	—
1902	44,499	37,762,160	1.79	—	0.17	1.96	1.72	0.31	—	0.07
1903	47,810	43,295,820	1.87	—	0.15	2.02	0.90	0.26	0.86	—
1904	50,444	46,765,840	1.80	—	0.17	1.97	1.19	0.28	0.50	—
1905	52,913	49,657,870	1.77	—	0.20	1.97	1.38	0.27	0.32	—
1906	55,454	53,795,920	1.73	—	0.19	1.92	0.57	0.23	1.12	—
1907	55,560	55,264,780	1.59	—	0.20	1.79	1.81	0.28	—	0.30
1908	59,839	64,307,180	1.61	—	0.18	1.79	1.41	0.28	0.11	—
1909	58,463	62,305,650	1.54	—	0.19	1.74	0.50	0.24	1.00	—
1910	60,456	67,420,780	1.57	—	0.22	1.79	1.64	0.28	—	0.13
1911	61,931	71,322,080	1.59	—	0.20	1.79	1.99	0.28	—	0.48
1912	65,361	79,857,960	1.69	—	0.17	1.86	0.81	0.25	0.80	—
1913	63,407	71,173,120	1.48	—	0.22	1.70	1.10	0.25	0.35	—
1914	66,897	80,865,170	1.61	—	0.21	1.82	0.63	0.24	0.96	—
1915	68,877	90,471,120	1.43	—	0.21	1.64	1.54	0.23	—	0.13
Total	1,269,308	1,304,407,501	1.72	0.4	0.16	1.91	1.28	0.28	0.42	0.07

In consequence of rains and of the mobilization of the Swiss army, which absorbed a large number of experts at the very moment of the harvest — the season in which their presence is most necessary — the work involved by the valuation of losses was considerably retarded, and the amounts at which indemnities were fixed were consequently affected.

We must recall that the Confederation and the cantons can maintain insurance against hail by means of grants. These grants are paid in accordance with the provisions of cantonal laws and of the federal law of 2 December 1893 on the improvement of agriculture by the Confederation. Twenty-one cantons make grants; only those of Uri, Glaris, Tessin and the Grisons make none, and thus prevent agriculturists from profiting by the federal grants in favour of insurance against hail. The other cantons become responsible for a part of the premium and the costs of a policy which varies from 15 to 40 per cent., and formerly the Confederation repaid to them half of the sums they thus spent. But the Federal Council was obliged to have recourse to inevitable measures of economy and to modify the provisions which had hitherto obtained. On 11 December 1914 it promulgated a decree by which cantons making grants in favour of insurance against hail receive annual federal grants equal to such cantonal grants. These federal grants may not however exceed: a) 50 per cent. of the cost of the insurance policies; b) 20 per cent. of the cost of insurance premiums in the case of vines, 12.5 per cent. in that of other crops.

This decree aimed at slightly diminishing the federal budget expenditure without bearing too heavily on the insured. It allowed the Confederation to save 30,062 francs in 1915.

The following table contains data as to the amounts of the cantonal and federal grants made in favour of insurance against hail in 1915 in the twenty-one cantons which make such grants.

Grants to Insurance against Hail from 1910 to 1915.

Years	Policies	Sums insured	Premiums	Cantonal grants (including federal grants)			Federal grants
				a) cost of policies	b) premiums	c) total	
		fr.	fr.	fr.	fr.	fr.	fr.
1910 . .	60,597	67,984,696	1,098,361	* 118,897	* 270,339	* 389,236	194,618
1911 . .	61,991	72,036,190	1,219,585	* 123,241	* 341,579	* 464,820	232,410
1912 . .	65,421	80,495,106	1,393,989	* 129,404	* 393,386	* 522,791	261,395
1913 . .	63,408	71,791,080	1,089,392	* 133,830	* 299,490	* 433,321	216,660
1914 . .	66,661	81,356,404	1,324,499	69,017	192,441	261,458	261,458
1915 . .	68,829	91,014,971	1,331,880	65,233	183,045	248,278	225,395

* Cantonal and federal grants together.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

FRANCE.

INSURANCE AGAINST HAIL, IN 1916. — *The Argus*, Paris, 14 October 1917.

In its last annual notes on the working of societies insuring against hail the *Argus* has been able as yet to deal only with three societies, *L'Aisne*, *La Ruche du Pas-de-Calais* and *La Régionale du Nord*, all of them in invaded country and unable to publish exact reports.

The following is a comparison, thus limited, of the business done in 1915 and 1916 by the companies having fixed premiums and the mutual companies.

	1915		1916	
Number of the insured . .	201,859	francs	198,316	francs
Value insured	927,128,713	"	938,510,419	"
Premiums and subscriptions	12,861,733	"	13,591,365	"
Indemnities	6,311,446	"	9,850,359	"
Reserve fund	23,246,462	"	23,644,005	"

It is seen that insured capital, premiums and especially indemnities have increased, the latter being in 1916 in excess by 3,538,913 francs of their sum in 1915.

The following table shows the business done by each company or society.

Names of companies (In order of priority of foundation)	Number of the insured	Value insured (francs)	Premiums or subscrip- tions in 1916 (francs)	Indem- nities, costs of settlement (francs)	Commissions and general costs (francs)	Profits or excess of the Year (francs)	Reserve fund at end of 1916 (francs)
<i>Stock Companies.</i>							
L'Abelle	63,909	261,769,763	5,058,815	4,078,673	1,212,862	279,693	2,956,005
La Confiance	32,603	129,399,411	2,094,642	1,471,065	564,905	50,836	2,136,171
	96,512	391,169,174	7,153,457	5,549,738	1,777,767	228,557	5,092,176
<i>Mutual Societies.</i>							
La Cérès	8,526	45,807,600	386,803	283,234	"	"	1,999,488
Société de Toulouse . .	25,788	121,134,330	974,921	870,360	"	"	5,565,392
Seine-et-Marne	2,600	47,558,015	376,862	17,941	"	"	1,416,764
Aiane (?)	"	"	"	"	"	"	"
Etoile	8,168	77,194,800	746,147	327,620	"	"	3,540,130
Beauceronne Vexinoise .	1,500	16,808,400	155,713	47,149	"	"	834,831
Seine-et-Oise	800	34,014,312	119,050	1,582	"	"	521,782
Garantie Agricole . . .	526	16,455,900	88,679	48,012	"	"	1,035,460
Ruche (?)	"	"	"	"	"	"	"
Régionale du Nord (?) .	"	"	"	"	"	"	"
La Grêle	6,219	15,560,120	225,407	89,694	"	"	1,232
Mutuelle Générale . . .	7,507	23,681,407	312,921	213,818	"	"	"
Ferme	22,956	96,207,309	2,025,000	1,532,500	"	"	3,636,750
Rurale (?)	17,214	52,910,052	1,026,405	598,711	"	"	(2)
	101,804	547,341,245	6,437,908	4,030,621	"	"	18,551,829
<i>Summary.</i>							
Stock companies . . .	96,512	391,169,174	7,153,457	5,549,738	1,777,767	228,557	5,092,176
Mutual Societies . . .	101,804	547,341,245	6,437,908	4,030,621	"	"	18,551,829
Total	198,316	938,510,419	13,591,365	9,580,359	1,777,767	228,557	23,644,005

(1) In invaded country.

(2) The *Rurale* is guaranteed by the *Société de Garantie de la Rurale*, a limited liability society having a capital of 1,800,000 francs.

Part III: Credit

ITALY.

RECENT PROVISIONS AS TO AGRICULTURAL CREDIT.

SOURCES:

DECRETO LUOGOTENENZIALE 10 MAGGIO 1917, N. 788, RECANTE PROVVEDIMENTI PER LA COLTIVAZIONE DEI CERFALI (*Lieutenancy Decree 10 May 1917, No. 788, containing Provisions for the Cultivation of Cereals*). *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 217, 19 May 1917.

CIRCOLARE N. 18,000 IN DATA 25 MAGGIO 1917 RELATIVA AD OPERAZIONI DI CREDITO PER LA COLTIVAZIONE DEI CERFALI ED ALTRI PRODOTTI ALIMENTARI (*Circular No. 18,000 dated 25 May 1917 as to Operations of Credit for the Cultivation of Cereals and other Foodstuff*).

DECRETO LUOGOTENENZIALE 28 GIUGNO 1917, N. 1035, CHE STANZIA UN FONDO DI VENTI MILIONI PER ANTICIPAZIONI AGLI ISTITUTI DI CREDITO AGRARIO, PER SOMMINISTRAZIONI AGLI AGRICOLTORI a termini del precedente decreto (*Lieutenancy Decree 28 June 1917, No. 1035, advancing a Fund of 20,000,000 liras to Institutions of Agricultural Credit to be granted to Agriculturists on the terms of the preceding decree*). *Gazzetta Ufficiale del Regno d'Italia* Rome, No. 154, 30 June 1917.

DECRETO LUOGOTENENZIALE 26 LUGLIO 1917, N. 1269, CONTENENTE DISPOSIZIONI PER AGEVOLARE ALLE ASSOCIAZIONI AGRARIE IL CREDITO PER LA COLTIVAZIONE DEI CERFALI. (*Lieutenancy Decree 26 July 1917, No. 1269, containing Provisions placing within reach of Agricultural Associations Credit for the Cultivation of Cereals*). *Gazzetta Ufficiale del Regno d'Italia* Rome, No. 195, 18 August 1917.

DECRETO LUOGOTENENZIALE 23 AGOSTO 1917, N. 1329, RECANTE PROVVEDIMENTI PER AGEVOLARE LA PROVVISTA DELLE SEMENTI E DEI CONCIMI CHIMICI AGLI AGRICOLTORI DELLA SARDEGNA (*Lieutenancy Decree 23 August 1917, No. 1329, containing Provisions facilitating the obtaining of Seeds and Chemical Manures by the Agriculturists of Sardinia*). *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 205, 30 August 1917.

DECRETO-LEGGE LUOGOTENENZIALE 23 AGOSTO 1917, N. 1592, CHE MODIFICA LE DISPOSIZIONI SUL CREDITO AGRARIO IN SARDEGNA CONTENUTE NELLA LEGGE (TESTO UNICO) 10 NOVEMBRE 1907, N. 844 (*Lieutenancy Decree 23 August 1917, No. 1592, modifying the Provisions as to Agricultural Credit in the Law (Single Text) of 10 November 1907, No. 844*).

DECRETO-LEGGE LUOGOTENENZIALE 4 OTTOBRE 1917, N. 1604, RECANTE PROVVEDIMENTI PER IL CREDITO AGLI ENTI AGRARI DEL LAZIO (*Lieutenancy Decree-Law 4 October 1917, No. 1604, containing Provisions for Credit to Agricultural Bodies in Latium*). *Gazzetta Ufficiale del Regno d'Italia*, Rome No. 242, 13 October 1917.

In recent months many measures have been passed in Italy which aim at encouraging agricultural production and largely increasing agricultural credit. We think it opportune to notice them briefly.

§ I. THE DECREES OF 10 MAY AND 20 AND 30 JUNE 1917.

The decree of 10 May 1917, No. 788, contains, as we already noticed in our issue for last July, a series of provision aimed essentially at intensifying the cultivation of cereals and other foodstuffs. In the matter of credit it authorizes the institutions of agricultural, ordinary and co-operative credit, the ordinary savings-banks, the *Monti di Pietà* and *Monti Frumentari* and the agricultural loan funds to grant loans for cultivating corn, other cereals, vegetables and edible root crops, independently of any provision of laws, rules or by-laws, and in the measure and for the terms required in individual cases, according to whether cultivation is intensive or extensive and according to the time in which crops ripen. It should be noted how opportunely the decree makes an appeal for the attainment of its goal not only to special institutions of agricultural credit but also to the other institutions of credit we have named.

The loans granted for such cultivation are, by one of the notable innovations in the sphere of agricultural credit, secured by a legal privilege which no longer bears, as in the past, on a single product, but indiscriminately on all products of a farm, including hanging fruits and provisions produced on the farm and stored in the dwelling-house and annexed buildings. This privilege need not be specially stipulated but arises from the single fact of the concession of the loan and has legal force without a particular agreement between the parties concerned.

Hitherto, on the other hand, loans for seeds, for cultivation and the harvest and for the acquisition of manures and fertilizers have enjoyed the privilege established by Clause 5 of Article 1958 of the Italian civil code, a privilege bearing on the single product for the benefit of which the sum or material lent was intended. In order to have a wider security institutions affording agricultural credit have had to make with the borrower a special agreement constituting a privilege in the terms of Clause 1 of the law of 23 January 1887, No. 4276 ; and thus it has been possible to create a privilege falling on the same objects as those on which the tenant's privilege is exercised in virtue of Clause 3 of the Article 1958 already cited. The decree with which we are now concerned provides, as has been said, that without formality or expense the privilege becomes the right of the lending institution.

The aforesaid loans are in the form of bills on which the purpose of the loans and the farm for which they are lent must be indicated.

The law of 1887 (Article 10) further provides that if a debtor alienate the property subject to the privilege without replacing it or allow it to deteriorate gravely or abandon the cultivation of his farm, or in any way, by his fraud or fault, notably diminish the security of the creditor insti-

tution, the latter may demand that the contract be determined according to the terms of Article 1165 of the civil code. This simple reference to common law is one of the causes of the meagre results produced by the statute in question. It was justly observed that in the cases contemplated by this provision the debtor in fault should at least have been denied the benefit of the delay authorized by the aforesaid Article 1165. A notable improvement on earlier conditions should therefore be considered to have been introduced by the provision of the decree we are examining, according to which a debtor who depreciates or withdraws the property subject to the privilege, or wholly or partially employs the sum lent to him for objects other than that for which it is lent, is punished by the penalty established by Article 203 of the Italian penal code, that is to say by imprisonment or a fine.

Another useful innovation concerns the simplification of the executive procedure. If the debtor does not entirely restore the amount of the loan when it falls due, the praetor may, at the instance of the lending institution and after he has obtained summary information, order the sequestration and sale of the property subject to the privilege. Such sale may take place without legal formalities.

Finally, agreements relative to the loans in question are exempt from every sort of stamp and registration duty; and legal acts and bills of exchange depending on these loans are subject to taxation in normal conditions.

Two other decrees were promulgated to extend and to apply that we have examined.

The first, dated 28 June 1917, No. 1035, was made to render the loans of which we have spoken more fitted to encourage the cultivation of corn and other cereals. It allows the concession to institutions of agricultural credit, authorized by special laws, of advances up to an amount of 20,000,000 liras at 3 per cent. interest (1). The sums thus advanced will be lent by the institutions to agriculturists by means of intermediary bodies, or directly when no recourse to intermediary bodies is possible. If the loan is required for the provision of seeds the institution of credit will give the landowner, when issuing a bill, a bond allowing him to withdraw at cost price a quantity of seeds equivalent to its amount from the provincial grain consortium. The State will provide the provincial grain consortium with seeds for distribution.

The loans which institutions of agricultural credit are authorized to make and the sums they receive as advances will bear interest at a rate not higher than 4 per cent. if the loans are made to agriculturists directly, or 5 per cent. if they are made through intermediary institutions.

The second decree in question (ministerial decree of 30 June 1917) aims at extending in the farming year 1917-1918 the cultivation of corn, other cereals and edible root crops in the southern mainland and the islands,

(1) This fund was augmented by 10,000,000 liras by the lieutenantcy decree of 11 November 1917, No. 1831. See *Gazzetta Ufficiale del Regno d'Italia* for 15 November 1917, No. 269.

and allows that, in so far as more land than in 1916-1917 is given up to these crops, the institutions of agricultural credit which are authorized by special laws may grant subsidies, up to the amount of 70 liras per hectare of the added area, for the execution of the work necessary to preparing it for sowing. Such grants may be made to landowners or lessees so long as they cultivate their lands directly, and to farmers having the usual contracts of tenancy. A subsequent ministerial decree, dated 24 August 1917, raised the maximum limit of the loans to 100 liras per hectare.

§ 2. THE DECREES OF 26 JULY AND 19 AND 28 AUGUST 1917.

Other noteworthy provisions are contained in the lieutenantancy decree of 26 July 1917, No. 1269, which aims at facilitating the cultivation of cereals by agricultural associations. By the terms of this decree agricultural loans and current accounts in favour of agricultural associations which are legally constituted, whether as moral corporations or as co-operative societies, for the conduct of the farms which they manage, will be regulated only by the rules of the lieutenantancy decree of 8 October 1916, No. 1336, which we examined in our issue for December 1916 (page 82), to which we refer the reader. When such loans and current accounts are granted for the cultivation of cereals by duly authorized institutions they will be secured by the privilege determined by Article 9 of the cited decree of 10 May 1917, No. 788, on the property specified in the first part of the same Article, and the privilege determined by the lieutenantancy decree of 8 October 1916, No. 1336, on other property. Lending contracts as to the operations we have indicated and copies of extracts therefrom will be exempt from the stamp and registration duty. Bills depending on such contracts, on which the limits of such contracts should be indicated, are exempt from the stamp duty. Finally the *Istituto Nazionale di Credito per la Cooperazione* is included among the institutions authorized to grant loans for the cultivation of cereals, and is assimilated to institutions of agricultural credit as regards the advances made by the State with which the lieutenantancy decree of 28 June 1917, No. 1035, deals.

In execution of the provisions we have examined the subsequent decrees of 19 and 28 August 1917 granted the following advances to each of the institutions of agricultural credit indicated below :

- 1) Savings-Bank of the Bank of Naples, for the provincial funds of agricultural credit which it manages in accordance with the law of 2 February 1911, No. 70, 10,000,000 liras.
- 2) Provincial fund of agricultural credit for Basilicata, 1,500,000 liras.
- 3) *Istituto di Credito Agrario Vittorio Emanuele III.* for Calabria, 1,000,000 liras.
- 4) *Cassa Adempriale* of Sassari and Cagliari, 1,500,000 liras each.
- 5) Federation for Agricultural Credit in Marcia, for the agricultural funds of the region, 1,000,000 liras.

6) Federation for Agricultural Credit in Umbria, for the agricultural funds of the region, 500,000 liras.

7) *Istituto Nazionale di Credito per la Cooperazione*, 2,000,000 liras.

The Bank of Naples is charged to make these advances which amount altogether to quite 19 million liras. Sums eventually not required by any of the cited institutions may be assigned to others which are found to have received insufficient advances.

§ 3. SPECIAL PROVISIONS FOR SARDINIA.

The provisions we have examined are general in character. They were founded on the decree of 10 May 1917, No. 788, which established the starting-points for State action in the matter of the intensification of the cultivation of food crops. But the examination of the conditions of single Italian districts brought into notice particularities which could not be neglected, and it became necessary to make special provision for some regions, among them Sardinia. We have already seen how, for growing cereals, the agriculturists of this island can obtain loans from the local institutions of agricultural credit, in order to prepare the land for sowing, at the rate of 100 liras a hectare; and that if they extend the area cultivated in 1916-1917 they can also obtain loans of seed for the additional land to be sown.

For the purpose of such grants the *Casse Ademprivili* of Cagliari and Sassari have already obtained from the State an advance of 1,500,000 liras each.

Further a lieutenantancy decree of 23 August 1917, No. 1329, authorizes these funds to acquire seeds in order to grant them at cost price to the *Monti Frumentari*, the agricultural co-operative societies and agriculturists, either for cash or on credit.

For this purpose the State will grant these funds not more than 2 per cent. of the value of the seeds granted. Other facilities are granted by the same decree for the acquisition of chemical manures by agriculturists who cultivate directly holdings not more than ten hectares in area, the State contributing with a sum of 200,000 liras to the payment of a quota of the price not exceeding 25 per cent.

In connection with the provisions having immediate force, and in order at once to obtain conditions favourable to an extension of cultivation in the coming year, certain modifications, which have for some time been the objects of votes and proposals, have been introduced into the law which regulates agricultural credit in Sardinia (single text, 10 November 1917, No. 844).

The new provisions, contained in the lieutenantancy decree of 23 August 1917, No. 1592, enlarge the whole sphere of activity of the *Casse Ademprivili*, for they establish that the advances referred to in Clauses 3 and 4 of Article 1 of the cited law of 10 November 1907, No. 844 (advances for buildings settlers' houses and suitable stables, making farm roads, restoring vineyards, providing water-supplies, etc.) may be made indiscriminately

to leaseholders, recognized agricultural co-operative societies, landowners and farmers.

Moreover these advances may be not only for the objects stated but also, to individuals and societies, for the protection of water-supplies and for the draining and irrigation of farms, the construction of wells and drinking-places and the systematization and breaking up of lands and for making enclosing walls and hedges and otherwise enclosing farms.

Before granting such advances the mortgage securing them will be sufficiently guaranteed if the applicant shows that he is the lawful owner of the land which is to be improved.

Farmers who are not owners, whether individuals or societies, may obtain the advances on a simple personal security to be fixed by the administrative council of the *Cassa Ademprivile*.

The decree we have cited further provides for the new regulation of the *Monti Frumentari* in the island. It aims at providing that such of them as possess a capital of less than 2,000 liras, or in any way cannot fulfil their functions to advantage, shall be obliged by a decree of the Minister of Agriculture, who shall hear on the subject the provincial *Cassa Ademprivile*, to unite with *Monti Frumentari* in conterminous communes or to be concentrated in the *Cassa Ademprivile*. The latter shall, if such a concentration take place, invest the capital of the concentrated *Monti* by preference in loans to the inhabitants of the communes in which they are situated. It may, with the authorization of the Minister of Agriculture, institute branches and appoint representatives where there appears to be need for them.

The advances of the *Casse Ademprivili* to a *Monte Frumentario* may amount to 20,000 liras. The maximum limit of the loans which the *Monti Frumentari* may grant is 1000 liras, whether the loans be in kind or in cash. On their loans, whether in kind or in cash, they may receive interest up to the rate of 2 ½ per cent. in addition to the rate they pay to the *Cassa Ademprivile*. They are administered by commissions composed of five members of whom one is nominated by the prefect of the council, two by the communal council, and by forty or twenty larger contributors to the land tax according to whether or not the commune in question have a population of more than 3,000. Finally the supervision of the *Monti Frumentari*, and also of the agricultural funds and the agricultural consortia which are not co-operative in form, is entrusted to the *Cassa Ademprivile* of each province, which is granted the staff and funds it consequently needs.

§ 4. PROVISIONS FOR AFFORDING CREDIT TO THE AGRICULTURAL BODIES IN LATIUM.

By a decree of 4 October 1917, No. 1604, the *Istituto Nazionale delle Assicurazioni* (National Institute of Insurance), the *Cassa Nazionale di Previdenza per l'Invalidità e la Vecchiaia degli Operai* (National Fund of Thrift for the Invalidity and Old Age of Workpeople), the *Istituto Na-*

zionale di Credito per la Cooperazione (National Institute of Credit for Co-operation), the savings-banks, the *Monti di pietà* and the institutions of ordinary and co-operative credit were authorized, independently of any provision of laws, regulations or by-laws, to grant loans to the agricultural bodies in Latium for the acquisition of land, the payment of capital and dues, for emancipations and, in general, for anything necessary to the improvement of land or the transformation of agriculture in properties held collectively. To secure such loans the agricultural bodies of Latium will allow the lending institutions to be regularly represented on the collectorship of the societies' revenue: and when the revenue collected in a year does not reach the whole amount of the payments due in that year to the lending institutions the State will advance the difference.

The *Istituto nazionale di credito per la cooperazione* is further authorized to give credit to the aforesaid agricultural bodies in order to provide them with necessary means for the pursuance of ordinary cultivation and the farming of their lands (acquisition of live and other stock and seeds, payment of wages and of expenses of harvest, etc.).

Loans for the acquisition of lands, emancipation from dues and, in general, the improvement of lands, can be for a maximum term of fifty years, the debtor having the option of extinguishing them earlier. The rate of interest may not exceed $5\frac{1}{2}$ per cent. and the State will contribute to its payment up to $1\frac{1}{2}$ per cent.

* *

To conclude: as the ex-Minister of Agriculture, Signor Raineri, remarked in a recent speech at Salerno on the government's agricultural policy, a new system of agricultural credit has gradually taken form in the recent exceptional provisions. The credit affected used to be essentially personal. The new measures have transformed it into a credit predominantly based on real estate. The decree of 10 May 1917 for the cultivation of food stuffs enlarged the basis of the privilege which the law had created, so that it now covers not only the crop which the loans contribute to produce, but also all crops of the land indiscriminately, including hanging fruit and stored provisions. Thus the rules were modified and land credit was created. The subsidizing of the institutions of agricultural credit with important resources of the Treasury was then undertaken, in order that they might grant loans as liberally as possible. All these measures were inspired by the fundamental desire to increase production and to satisfy the new needs of agriculture.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES

CANADA.

THE SHORT TERM RURAL CREDIT ACT OF MANITOBA. — *The Grain Growers' Guide*,
Winnipeg, 17 October 1917.

Mr. George W. Prout presented to the Manitoba legislature at their session of 1917 an Act providing for rural credit which received the royal assent on 9 March. This is the Short Term Rural Credits Act which promises to have much influence in building up agriculture in Manitoba.

The Act provides for the incorporation of a rural credit society in any municipality on the application of fifteen farmers to the governor-in-council. An officer is appointed by the government to act as secretary-treasurer to the society until the organization is completed when such an appointment is made permanently. The society cannot begin business until it have secured fifty members each of whom has subscribed for one share of \$100 and paid up 10 per cent. of its amount. The provincial government subscribes for a sum equal to half that subscribed by the fifty farmers, namely \$2,500, and the local municipality for other \$2,500. The total capital stock thus reaches the sum of \$ 10,000. Two or more municipalities may co-operate to pay the municipal subscription, but the total municipal subscription must in no case exceed 50 per cent. of that of the farmers. The municipal subscription may be in municipal bonds. The capital jointly subscribed by fifty farmers, by the rural municipalities and by the province of Manitoba gives a basis for credit at the bank.

When the society is completely organized the conduct of business is vested in a board of nine directors, three elected by the members of the society, three named by the municipality and three appointed by the government of Manitoba. The directors appointed by the Government must include a graduate in agriculture who becomes the government supervisor of agriculture in the district. He may be known as district representative or county agent. One director, who acts as secretary, must be a capable accountant and is the only paid official of the society.

The Act is specifically framed to provide for loans for a definite period to enable regular farming operations. It allows of loans for the following purposes :

1. The purchase of seed, fodder or other supplies ;
2. The purchase of implements and machinery ;
3. The purchase of cows, horses, sheep, pigs and other animals :

4. The payment of the cost of operations of farming, ranching, dairy farming or the like ;

5. The payment of the cost of preparing lands for cultivation.

All loans are guaranteed by the society. Each member is liable up to the limit of the stock he holds and for whatever he borrows. The safety of the joint security provided under the Act enables the society to borrow from the bank at 6 per cent. The money thus borrowed is lent to the farmer at 7 per cent. on his note, and the society's security consists in the animals, machinery, goods or personal property which he purchases wholly or partly with such loan, and of the offspring or products arising out of the animals or goods so purchased.

The notes covering these loans mature not later than 31 December of the year in which they are made. Thus the Rural Credits Act saves both the banker and the farmer the inconveniences incidental to frequent renewals of these notes. When however the loan is for machinery or live stock, or other object from which early returns cannot reasonably be expected, the loan may, with the approval of the directors of the society, be renewed from year to year.

Some scepticism which existed was proved unfounded, when the co-operative spirit of the farmers in the district caused the formation of the St. Andrews Rural Credit Society, having fifty-two members, in the rural municipalities of St. Andrews and St. Clements. The headquarters of this society are at Selkirk.

The first application for a loan was approved by the directors of this society on 6 June, and on 17 October about 25 loans, of the approximate value of \$550 each, had been made. The amount of loans varied from \$150 to \$2,000, and they were for practically every purpose for which money can be borrowed under the Act except for the purchase of seed. Seventeen were for breaking up land.

We reproduce a typical application for a loan :

" I, John William Brown, of the Municipality of St. Clements in the Province of Manitoba, hereby apply to the St. Andrews Rural Credit Society for a loan of Twelve Hundred Dollars (\$1200) under the terms of the Rural Credits Act, to be used for the following purposes :

For purchase of cattle	\$	300
For purchase of Machinery	"	50
For expenses of putting in and taking off Crop	"	350
For clearing and breaking 50 acres. This part I wish renewed	"	500
	\$	1200

and I agree to pay the said loan on or before the thirty-first day of December 1917, with interest at the rate of seven per cent. per annum from the dates the same or parts thereof are received to date of payment.

John W. Brown
(Signature)

June 8th 1917.

" APPROVAL.

" To the Dominion Bank.

" The St. Andrews Rural Credit Society hereby approves the foregoing application and guarantees the payment of the said loan

" Passed by the Directors this 15th day of June 1917.

F. W. HOOKER,
President.

CHAS. H. GIFFORD,
Secretary.

* * *

It is an interesting circumstance that a farmer whose application for a loan is granted uses the loan only as he needs it and pays interest only on the used portion.

Since the St. Andrews society was founded new societies have been organized at Langruth, Oakville, Oak Lake and Biscarth. Farmers who have experienced the advantages of the credit afforded are the best propagandists of the movement.

The Rural Credits Act also provides that the societies may act as agents for the members in buying supplies and selling products, and may promote co-operation for the improvement of the conditions of farm life, endeavouring to extend their activity to all residents in their districts.

An important work is directly encouraged by the appointment of graduates of agricultural colleges to the directorate of societies. These men will do the same work as the agricultural representative in Ontario and the county agent in the United States, but they have at their service an instrument which will much increase the rapidity and effectiveness of their action. The Rural Credit Societies will bring them into immediate touch with many of the farmers who need their help most. The following are a few of the directions in which it is suggested that they may render service: they may help the farmer to secure good seed and better stock; manage or advise in the management of co-operative buying or selling associations; give demonstrations of various farming operations, such as the elimination of gophers, weeding and the controlling of plant and animal diseases; secure plans for modern farm buildings; hold courses of lectures; and superintend the application of loans to the objects for which they are intended.

This brief analysis has shown that the Rural Credits Act of Manitoba is of the first importance to agricultural organization.

ITALY.

1. THE INSTITUTION OF A SYSTEM OF CURRENT ACCOUNTS AND POSTAL ORDERS. — *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 219, 15 September 1917.

By the lieutenantcy decree-law of 6 September 1917, No. 1451, a system of current accounts and postal orders, dependent on the Ministry of Posts and Telegraphs, has been instituted in Italy. It aims at eliminating the

risks of transporting corn, at economizing the time and money spent on such transport, at facilitating exchange, diminishing the passage of coin, etc. (1). The following are the chief rules of the new system.

Every individual and every legal person, including firms, collective bodies and offices, may benefit by the new system on making application and on fulfilling the conditions established by the rules. Married women and minors who have reached the age of eighteen are fully qualified for this purpose.

The assets of the current accounts are formed: 1) by payments of money by those in whose name they stand or by others for their benefit; 2) by inscription in their accounts of their credit, by means of recovered orders, bills received, values bequeathed to them or other securities; 3) by credit transferred from other accounts.

Persons having current accounts may use their credit a) to withdraw money or cause its withdrawal at the office where they have an account; b) to cause payments to be made by means of the post-offices; c) to have their credit transferred wholly or partially to another person having a current account (*bancogiro*).

The administration provides that all operations belonging to the service shall immediately be effective, and the administration is liable for the whole sum paid in, gradually freeing itself from such liability as payments are made in the manner established by the rules. All other liability is excluded.

Action for the rectification of a postal current account must be taken within a year. All other action in connection with such an account must be taken within a period of three years. If such term elapse without any operations or other action suspending the rule being undertaken by the person in whose name the account stands, the credit of the account, including deposited securities, is acquired by the administration. Disputes relative to postal current accounts belong to the commercial jurisdiction.

A current account is determined legally by the forfeiture, the deprivation or the failure of the person in whose name it stands. Until it be wound up and the balance be placed at the service of the person in whose name it has stood or his representatives, his credit cannot be sequestrated or pledged.

No person having a current account can draw orders on one day in one place for a larger sum than 10,000 liras.

Every operation of paying in money or credit, transferring it or causing payments to be made, is subjected to a fixed duty of ten *centesimi* payable by the applicant. On payments to be effected in cash there is another duty of twenty-five *centesimi* on every thousand liras paid. For every extract from an account, beyond that sent periodically to the person in whose name it stands, a due of fifty *centesimi* is payable. No other tax

(1) For the economic and legal importance of such a measure in Italy see the learned report presented to the president of the Chamber on 22 June 1917 by the parliamentary commission charged to report on the relative scheme for a law presented to parliament at the session of 6 December 1916 by the Minister of Posts and Telegraphs (Fera) *Atti parlamentari*, No. 686-A.

or fiscal burden will be placed on the operations or the documents involved by this system. Correspondence between those benefiting by it and the administration will be free of postage.

Available funds will be paid into a current account which will bear interest to the deposit and loans fund at a rate corresponding to the average annual interest which this fund receives from the aggregate capital it administers.

Of annual net profits two tenths will go to the formation of a reserve fund within the fund just mentioned and administered thereby. The remaining eight tenths will be paid to the *Opera nazionale per la protezione e l'assistenza degli invalidi della guerra* (National Enterprise for the Protection and Assistance of Invalids of the War).

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2. THE PROVINCIAL FUND OF AGRICULTURAL CREDIT FOR BASILICATA IN 1916. Report on the year 1916. Potenza, 1917.

Pursuing our examination of the activity in 1916 of the chief institutions of agricultural credit in Italy (1), we find some data as to the business done in that year by the provincial funds of agricultural credit for Basilicata.

Credit afforded during the year by means of the Monti Frumentari, the agricultural funds and the agricultural consortia for seeds, manures, fertilizers, expenses of sowing, harvest, cultivation, live and other stock. Total turnover 3,611 bills for 1,297,316 liras (average 359 liras a bill) as against 2,755 bills for 1,080,855 liras at the end of 1915. The turnover of the current accounts was 87,586 liras. The balance in bills on 31 December 1916 was 622,102 liras as against 548,382 liras in 1915.

Direct credit to individuals regulated by the royal decree of 11 October 1914, No. 1089 (2). — Total turnover 651 bills for 699,385 liras as against 712 bills for 828,140 liras in 1915. The balance in bills on 31 December 1916 was 346,568 liras.

Loans to those who suffered losses by fieldmice. — Requests for seed for 23,191 hectares (3) covered 2,499,148 liras, of which 1,763,904 liras were paid on 2,452 bills.

Credit for acquisition of live stock. — Current accounts relative to this form of credit fell from 23,285 liras at the end of 1915 to 16,919 liras at the end of 1916, and the bills in hand were reduced from 375 for 609,857 liras to 326 for 570,147 liras. The diminution of business of this kind is essentially a consequence of the requisition of live stock and of previous bad years.

Credit for agricultural improvements. — In this category there were 100 loans amounting to 750,932 liras, of which 28,750 liras were for water-con-

(1) See our issues for August and September 1917.

(2) See our issue for January 1915.

(3) 1 hectare = 2.47 acres.

ducts, 106,060 liras for modern stables, 278,822 for settlers' houses, 337,000 liras for settlers' houses and modern stables. Eighty-four loans for 621,560 liras are in course of amortization. As regards their term, 48,300 liras fall due in from five to fifteen years, 365,150 liras within twenty years, 38,500 liras in from twenty-five to thirty years, 186,884 liras within thirty-five years, and 112,088 liras in from forty to fifty years. The normal term is twenty years, the maximum term thirty-five years.

Loans for plantations and reforestation amounted to 9,331 liras at the end of 1915 and fell to 9,133 liras at the end of 1916. Loans for irrigation amounted to 30,095 liras, and loans for hedges remained at the same level as on 31 December 1915, namely 1,305 liras.

The capital of this institution — the true capital and the emergency and reserve funds — reached 1,915,910.66 liras, to which 145,050.31 liras of the net profits of the previous year must be added, making a total of 2,060,951.97 liras.

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3. THE "FEDERAZIONE PER IL CREDITO AGRARIO NELL'UMBRIA". — Report of federal council for 1916. Perugia, 1917.

The law of 2 January 1910, No. 7, on agricultural credit in Marche and Umbria (1) institutes in each of these regions a federation formed by the agricultural funds and discounting institutions (savings-banks and co-operative banks) which exist there and are spontaneously associated. Such a federation is called upon to administer the fund destined by the same law for the exercise of agricultural credit, a fund which amounts to 700,000 liras for Marche and 400,000 liras for Umbria. It behoves this fund in particular to provide for the endowment of agricultural funds and the temporary employment of capital not yet bestowed on such an object. We now learn from the report of the federal council of the Umbrian federation that on 31 December 1916 the agricultural funds active in Umbria numbered thirteen. In that year their discount and loans business covered the sum of 401,448.03 liras and left them a balance of 169,137.15 liras on 31 December. The sum of 290,368.03 liras had gone to provide manures, 83,567 liras for stock, implements and machinery, 16,850 liras for fertilizers, 7,795 liras for cultivation, 2,250 liras for seeds and 618 liras for the harvest.

UNITED STATES.

1. THE ACTIVITY OF THE FEDERAL LAND BANK OF ST. LOUIS. — *The Country Gentleman*, Vol. LXXXII, No. 16, Philadelphia. 17 November 1917.

The Federal Land Bank of St. Louis has the function of providing credit for the farmers of three States — Missouri, Illinois and Arkansas. It

(1) For the regulation of agricultural credit in Marche and Umbria see the article in our issue for June 1915, page 77.

was founded in virtue of the federal law of 17 July 1916 on agricultural credit, and within six months it issued and sold \$1,000,000 worth of bonds based on mortgages which it held as security for loans to farmers of the States named.

It also has on file fully examined applications for additional loans amounting \$3,000,000, and applications not yet fully examined for about \$10,000,000. The manager believes that the bank's loans to farmers in the district will aggregate \$40,000,000 in the course of a few years.

Charts showing the productivity of the land in every county of the district and the general characteristics of the soil have been prepared. From these the bank's officials can obtain information as to crops, live stock, dairy production, the value of farm improvements, schools, churches, roads.

In order to teach farmers their own needs and opportunities the bank has decided to form an educational department. The hope is that such an organization will be perfected as will give to every borrower the practical help needed to make his farming methods and the management of his farm thoroughly efficient.

The methods followed in granting loans are themselves as educational as they are practical, a fact made clear by the following example. An Arkansas farmer applied to the Federal Bank of St. Louis for a loan of \$1000, of which half was to build a barn and half pay for tilling. The bank sent an expert to appraise and survey the farm, and shortly afterwards the applicant received from the bank a letter which was substantially as follows :

" Our survey of your farm indicates that it would not be to your best interest to lend you \$500 to build a barn. Your land is worn out. You are not producing enough to fill the barn you have. Our report shows that you need fertilizers and drainage. We are willing to lend you \$500 to buy phosphates or limestone to build up your land and \$500 for tilling. We believe that you can use \$1,000 profitably in that way and double the yield of your farm. We have therefore approved of your application for the loan provided you use the money as we have suggested. When you put your land in condition to produce what we think it is capable of producing we shall be glad to consider your application for additional money to build a barn ".

Thus the bank extends practical as well as financial help to the farmers of the St. Louis districts, and the reports of the bank's " field men " show that the farmers lack practical methods as much as money. In particular this fact is proved by reports from some parts of Arkansas and Southern Missouri, which speak of exhaustion of land due to no rotation of crops and to a lack of proper fertilizers, of mere sheds serving as barns, of houses hardly fit for habitation, and of neighbourhoods which have unimproved roads and inadequate schools and churches. In many cases the bank has recommended that applicants for loans build suitable houses instead of using the money they borrow to buy live stock or clear additional land.

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2. THE CALIFORNIA FEDERATION OF FARMERS' CO-OPERATIVE MARKETING ASSOCIATIONS. — *California Fruit News*, Vol. 56, No. 1529, San Francisco, 27 October 1917.

At a meeting held last October in the offices of the State Market Director in San Francisco the final organization was effected of the California Federation of Farmers' Co-operative Marketing Associations. The associations which joined it were the California Prune and Apricot Growers, the California Associated Olive Growers, the California Peach Growers, the California Associated Raisin Company, the Central California Berry-growers' Association, the Sebastopol Apple Growers' Union, the Poultry Producers of Central California and the Poultry Producers of Southern California. Several associations are still considering the advisability of joining and it is expected that some of them will decide in favour of doing so. They are the Rice Association, the Dairy Association, the Almond Exchange, the Walnut Association, the California Fruit Exchange and the California Fruit Growers' Exchange. The Market Director states that the Citrus Exchange wishes to keep in touch with the federation but to remain outside it for the present.

The Market Director intimates that the following are the objects of the federation, which is managed by an executive committee :

" To secure co-operation on all problems of common interest.

" To secure an interchange of thoughts, ideas and experiences.

" To secure collective data on forms of organization and the dissemination of information relative to laws proposed and adopted, opinions and judgements of courts, commissions and tribunals involving the scope and limitation of the activities of co-operative marketing associations.

" To develop plans for the further elimination of waste in the cost of distribution of products.

" The joint employment of brokers or salaried agents at Eastern marketing points.

" The joint employment of an all-year-round sales organization for the American home markets for the various California farm products, in their respective seasons, to be handled through the established channels or otherwise.

" The joint employment of demonstration organizations to aid, encourage and educate the retail dealers throughout the country to specialize on California food products.

" Joint effort in national publicity and educational advertising.

" Development of foreign markets by the joint creation of foreign-sales organizations.

" To suggest and carry out plans for more favourable State and Federal legislation in the proper interest of California farm products.

" Favourable Federal tariffs affecting California farm products and joint opposition against the enactment of possible harmful or unfair tariffs.

" To develop plans for the collective purchase and production of supplies used by all or several of the associations.

" To develop plans for co-operation in securing proper transportation and proper transportation rates and facilities.

" To develop plans for securing financial accommodations in the primary financial markets at the lowest possible interest rates:

" To develop plans for creating and maintaining a labour bureau or other methods for handling the labour problems of farmers and marketing associations.

" To suggest and do any and all proper things which, at any time or place, may be advantageous and beneficial to co-operative marketing associations in general and to the member associations in particular ".

Part IV: Agricultural Economy in General

CANADA.

COLD STORAGE IN CANADA.

OFFICIAL SOURCE :

REPORT OF INVESTIGATION INTO COLD STORAGE IN CANADA UNDER THE ORDER IN COUNCIL OF NOVEMBER 10, 1916 in *The Labour Gazette* issued by the Department of Labour, Ottawa, August 1917.

§1. GENERAL CONDITION OF THE BUSINESS OF COLD STORAGE.

About half the meat killed in Canada, and about one fifth of the total quantity of eggs, as much of the butter and a third of the cheese produced in the dominion are subjected to cold storage during their passage from producer to consumer. The trade in meat, eggs and dairy produce and their distribution are therefore controlled to an important extent by the owners of warehouses for cold storage.

a) *Distribution of Refrigerated Space among Different Kinds of Companies.* — Altogether there are in Canada about 110 of these warehouses. They belong to seventy-six different companies, two of them to American companies. Of the seventy-six companies seven conduct only one establishment each; and five are large exporting houses which own altogether nine cold storage establishments and export chiefly dairy produce, and each of which has at least one branch in Montreal. Of those twelve of the companies which deal chiefly in fish two own two establishments each, the others one each. Thirty-nine of the warehouses store general produce, including meat, dairy produce, eggs and fish, in proportions varying with their situation. One of these is affiliated to a slaughterhouse company, known in Canada as an *abattoir* company, but the other thirty-eight are independent.

Of a total of more than 24,000,000 cubic feet of refrigerated space about 12,200,000 are held by the abattoir companies, 2,650,000 by the exporting houses dealing in dairy produce and eggs, 2,250,000 by the fish companies and 7,200,000 by the companies having warehouses for general cold storage.

The greatest area for cold storage is therefore owned by the abattoir companies. These are most completely organized. They buy live stock in the centres most conveniently supplied, kill it in their own slaughter-houses, manufacture the by-products elaborately and efficiently and preserve the whole in their refrigerated warehouses. Thus they can keep dressed meat as an article of trade longer than the local butcher, and supply the home or the foreign market as opportunity arises. Three of these huge companies control trade still further, for they have retail branches in the larger cities to which they consign about 40 per cent. of the merchandise they sell for home consumption, allowing these branches a slight reduction on cost. One of these latter companies has about forty and another about eighty of such retail stores. As retailers the abattoir companies have an immense advantage over small butchers because they can so easily manufacture by-products. They ought in consequence to allow for a smaller margin of profit when selling, and to be able to pay a higher price to the producer, but the investigation under the order-in-council of 10 November 1916 has not shown that either of these consequences has been realized.

The abattoir companies have a secondary but considerable trade in butter, cheese, eggs and fish.

b) *Distribution of Refrigerated Space among Public and Private Establishments.* — The cold storage warehouses, owned by the various kinds of companies which have been mentioned, belong to the three classes of public and subsidized, public but not subsidized, and private warehouses. In theory a public warehouse is one which stores goods belonging to the general public, a private warehouse one which itself trades in the goods it stores. In fact however almost all the so-called "private" warehouses are to some extent "public", and the report of the investigation gives one instance of a large "public" warehouse which derives almost its whole profit from its own trade.

The plan of subsidizing these warehouses was instituted in 1907 by the Canadian Department of Agriculture to meet a necessity for more space for public storing. The government makes to newly organized cold storage establishments a total grant of 30 per cent. of the cost of construction, 15 per cent. being paid in the first year, 7 per cent. in the second, 4 per cent. in the third, 2 per cent. in the fourth and 2 per cent. in the fifth. A warehouse thus subsidized is required by law to store goods for others than its owners on request. The grant has been completely paid to twenty-five warehouses; and eight have already received instalments thereof amounting to \$132,539, while \$20,953 are still due to them. Only three of the subsidized warehouses limit themselves to storing for the outside public. The others contend that their warehouses are not sufficiently used by the public and do not thus yield them a sufficient income to enable them to meet their expenses without also themselves trading in the stored commodities.

Out of the total refrigerated area of more than twenty-four million cubic feet 3,823,780 cubic feet belong to the public and subsidized warehouses, 6,505,804 cubic feet to the public but not subsidized warehouses,

and 13,800,000 cubic feet or more than half to the so-called private warehouses.

In 1916 the total amount of produce handled by the subsidized companies was more than 84,000,000 pounds, of which 12 per cent. was stored for others. In the same year the public but not subsidized warehouses handled about 85,000,000 pounds, of which 18 per cent. was stored for others. The exact amount of produce stored in 1916 in warehouses of these two classes by others than the firms which occupied them was slightly over 24,000,000 pounds. But the total quantity of produce placed in 1916 in cold storage warehouses not belonging to its owners was about 88,000,000 pounds. It follows that 64,000,000 pounds or 73 per cent. of the total quantity owned by the outside public were stored by the so-called private companies, which therefore can certainly not be said to deserve their name. It may be, however, that a considerable share of this amount belonged to companies owning cold storage warehouses who stored it outside their own premises.

§ 2. FUNCTIONS OF THE BUSINESS OF COLD STORAGE.

The original and essential function of a cold storage warehouse is the preservation of food but in Canada this has come to occupy a second place. In Canada these warehouses are concerned with: 1) the purchase of food-stuffs from the producers, 2) their preparation and preservation, 3) their distribution in a) the home and b) the foreign market.

Canada's export trade in products which have been in cold storage is practically limited to four or five large meat companies and three or four large firms exporting cheese and other dairy produce. This export trade, which has attained to immense proportions since the outbreak of war, has greatly increased the capital and strengthened the organization of the companies concerned in it. But it has made of the home consumer, although he lives in a land of plenty, a buyer who competes with a hungry world.

Table I. shows the comparative positions of the home and the export trade in meat, eggs and dairy produce.

According to the estimates of the Agricultural Department the annual home consumption of butter in Canada is 27 pounds a head, that of cheese 2 1/2 pounds a head and that of eggs 17.3 dozen a head.

The commission appointed by the United States Department of Agriculture to inquire into the general situation as regards the meat supply reported that in 1900 the consumption per head of the Canadian population was 54 pounds of beef, 11 pounds of mutton and lamb and 44 pounds of pork; while in 1911 it was 61 pounds of beef, 9 pounds of mutton and lamb and 67 pounds of pork. The consumption of pork therefore increased proportionately more than that of beef. That it continued to do so after 1911 might be concluded from the circumstance that 325,000,000 pounds of pork and only 295,000,000 pounds of beef passed through the

government inspected slaughterhouses in 1916; but it must be remembered that there was a contemporaneous increase in the exports of fresh pork. In 1913 the cold storage companies exported only about 2 per cent. of the total quantity of fresh pork they sold and 24 per cent. of the bacon; in 1916 they exported 26 per cent. of their fresh pork and 91 per cent. of their bacon. Of the ham sold by them they exported less than 1 per cent. in 1913 and about 15 per cent. in 1916. The figures in column 2 of Table I are not accurate but they are approximate and serve for comparison.

The table shows that about one fifth of the butter produced in Canada, more than a third of the cheese and about a fifth of the eggs passed through cold storage. The fraction of the beef killed in government inspected slaughterhouses which did so was about two thirds. Fresh pork converted into bacon and ham loses about 10 per cent. of its weight. If allowance be made for this fact it appears that the total weight of the pork, bacon and ham in cold storage approximated to that of all the pork killed in government inspected slaughterhouses. About half the quantity of mutton and lamb so killed passed through cold storage.

Practically the whole export of meat comes from the large abattoir companies. Probably about forty-five of the forty-seven million pounds of cheese mentioned in column 21, as stored in warehouses not the property of the storers, belonged to wholesale dealers or cold storage firms owning other warehouses, and were intended to be exported.

The grocers and butchers of the larger cities depend greatly on the abattoir and other cold storage companies for their supplies of butter, eggs, cheese and meat. This means that these companies have to a marked extent assumed the task of feeding the larger industrial and commercial centres of Canada. In the course of the investigation under the order-in-council invoices were secured from all the more important grocers in the largest towns of the dominion. It was discovered that they bought directly from the cold storage companies practically all the bacon and ham they sold, a large proportion of the cheese, about half the butter, and, between October and April, a large proportion of the eggs. Their other sources of supply were the creameries for butter, the wholesale dealers and in a few cases the cheese factories for cheese, and the wholesale dealers and the farmers for eggs. Really fresh eggs are necessarily bought from farmers but in one case a grocer of good standing in Toronto bought his "fresh laid eggs" from a cold storage company. These companies have lately undertaken to supply dealers with the most expensive kinds of meat, butter, cheese and eggs, and this branch of their business is growing rapidly. Some of them now manufacture fancy cheeses and do a well established trade in them.

§ 3. PROFITS OF THE COLD STORAGE COMPANIES.

In the course of the investigation question-forms were sent to the various companies asking in the case of each for sworn testimony as to

TABLE I.

Commodity	Total production of cheese and eggs (1) total quantity of meat (dressed weight) killed in government slaughterhouses (2) 1 Jan-1 Dec. 1916	Estimated Home Consumption (3)	Total quantity bought by cold storage companies and total cost when warehoused		Average cost per pound	Total quantity sold and amount for which sold (12)		Average selling price per lb. or dozen	Margin per lb. or doz. (4)	Quantity sold for export from Canada according to the Trade and Commerce Returns (11)	
	lbs. or doz.	lbs. or doz.	lbs. or doz.	\$	cents	lbs. or doz.	\$	cents	cents	lbs. or doz.	cents
Butter	224,000,000	216,000,000	46,501,063	14,358,160	30.83	43,867,720	14,359,430	32.73	1.90	7,270,270	38.20
Cheese	202,000,000	20,000,000	76,806,324	13,908,000	18.11	72,638,800	13,713,058	18.88	0.77	157,768,762	19.40
Eggs	145,000,000	138,400,000	28,122,683	7,326,214	26.05	26,410,119	8,018,002	30.36	4.31	4,504,463	34.40
Beef	295,823,000	484,000,000	189,952,154	20,425,417	10.75	170,472,195	19,522,000	11.45	0.70	10,998,879	12.80
Fresh Pork	—	—	11,312,331	16,789,800	15.70	69,629,364	10,909,167	15.67	0.83	—	—
Smoked Pork	—	—	45,723,503	7,009,367	15.33	54,056,692	9,927,020	18.36	3.03	—	—
Pork	325,636,000	536,000,000	158,848,834	23,799,167	15.00	123,686,256	20,836,181	16.85	1.85	12,005,270	14.10
Bacon	—	—	125,605,834	19,795,040	15.76	151,309,429	30,787,823	20.34	4.58	164,401,293	19.10
Ham	—	—	14,383,485	2,761,676	19.20	14,390,367	3,067,809	21.32	2.11	3,858,932	16.10
Mutton and lamb	28,956,000	13,720,000	13,609,605	2,286,939	16.80	12,666,380	2,205,229	17.41	0.61	183,601	14.10

(1) Estimation based on the exports plus the estimated *per capita* consumption and the figures of the last decennial census. The population in 1916 taken to have been eight millions. — (2) This includes practically all the live stock killed in government inspected slaughterhouses and represents, according to the estimates of the Agricultural Department, about half the live stock killed in Canada. — (3) The figures for butter, cheese and eggs are reached by taking the *per capita* consumption estimated by the Agricultural Department for butter, cheese and eggs and multiplying it by eight millions. The figures regarding meat in this column are based on the *per capita* consumption of beef, pork and mutton and lamb estimated by the commission appointed by the Agricultural Department of the United States who reported in 1916. — (4) This is the difference between the average selling price and the average cost price including all expenses of storing, over head charges, loss and profit. — (10) A large percentage of the fresh pork bought was converted into bacon, ham and smoked pork and sold as such. — (11) This includes sales made by all dealers of all kinds in Canada. — (12) Where the quantity sold exceeds that bought, the excess partly represents the quantity on hand at the beginning of the year. — (13) 72,000,000 lbs. are probably more than the actual weight consumed for the consumption of mutton and lambmeats to be decreasing.

TABLE I. (continued).

Commodity	Quantity sold for export by the cold storage companies of Canada (9)		Average selling price per pound		Margin per pound or doz. (5)		Quantity sold for home consumption by the cold storage companies in Canada		Average selling price per lb. or doz. (6)		Margin per lb. or doz.		Quantity available for consumption 1916		Quantity received into storage during 1916		Goods stored in cold storage warehouses by others than the firms operating these warehouses (14)	
	lbs. or doz.	\$	cents	\$	cents	cents	lbs. or doz.	\$	cents	cents	cents	cents	lbs. or doz.	lbs. or doz.	lbs. or doz.	lbs. or doz.	lbs. or doz.	lbs. or doz.
	11	12	13	14	15	16	17	18	19	20	21	22	23					
Butter . . .	5,241,297	1,616,297	31.40	0.57	29,376,287	9,750,405	33.18	2.35	8,824,657	7,277,948	10,494,659	4,710,717	3,669,003					
Cheese . . .	55,942,457	10,373,191	18.54	0.43	15,536,524	3,202,290	20.64	2.53	4,667,910	4,731,118	47,995,774	6,803,571	3,316,613					
Eggs . . .	6,057,522	2,036,058	33.61	6.56	16,341,677	4,877,425	29.84	3.79	6,515,188	2,623,436	5,708,418	4,836,349	1,703,948					
Beef . . .	13,885,286	1,381,227	9.94	70.81	110,104,060	12,386,520	11.25	0.50	6,793,916	31,537,160	16,970,038	657,858	8,568,028					
Smoked Fresh pork . . .	24,904,787	4,191,416	16.83	3.68	47,007,346	7,400,648	15.74	0.90	13,599,032	9,455,700	1,623,622	378,122	144,582					
Pork . . .	7,164,306	1,378,750	19.24	3.91	26,673,188	5,220,908	19.57	4.24	7,782,791	7,357,657	—	—	—					
Bacon . . .	32,069,093	5,570,168	17.37	2.37	73,680,534	12,621,556	17.13	2.13	—	—	—	—	—					
Ham . . .	136,899,618	27,723,928	20.25	3.68	12,537,254	2,461,899	19.66	3.09	5,818,464	8,812,385	36,844	none	9,815					
Mutton and lamb	2,111,764	355,169	16.82	72.38	10,483,628	2,403,881	22.93	3.73	815,703	1,236,716	37,370	3,900	10,721					
	45,400	7,614,161	16.81	0.01	12,003,416	2,088,283	17.39	0.59	616,917	2,108,057	1,576,285	13,255	840,259					

(5) This is the difference between the average cost price per pound or dozen and the average selling price for export. — (6) This is the difference between the average cost price and the average selling price for home consumption. — (7) This does not represent a loss as much meat sold for export in 1916 was bought in 1915 when the average cost of cold storage warehouses was lower than in 1916. — (8) This includes some smoked pork and bacon, which had very similar prices. (9) The sum of the quantities sold for export and home consumption will be seen not to equal the total quantity sold. This is because many cold storage companies could not state whether they sold for export or home consumption. — (14) These columns should be read with column 2 to reach the quantity of produce stored, but it must be remembered that some of those who thus stored in premises not their own were themselves cold storing companies, and that the categories of merchandise in column 2 and in columns 21, 22 and 23 are not therefore mutually exclusive.

a) the quantity of each commodity bought during the year ; b) its cost when stored, including charges for freight and unloading ; c) the total quantity thereof sold and the total amount for which it sold. From the data thus obtained the average cost and selling prices were computed. The difference between the two, which the investigators call the "margin", represents the cost of storing, losses, interest on the investment, extra charges, other expenses in which a commodity may involve the cold storage company, and finally the company's profit.

Since 1913 the margin on butter has increased by 2 cents a pound, that on cheese by 0.35 cents a pound and that on eggs by 0.96 cents a dozen. On beef it has decreased by 0.12 cents a pound and on ham by 0.76 cents a pound, while on bacon it has increased by 2.25 cents a pound.

Table II shows in detail for the ten largest cold storage companies the quantities they bought and sold, their average buying and selling prices, and their margins, as regards butter, eggs, cheese, beef, fresh and salt pork, bacon, ham, mutton and lamb. The table does not specify costs of storage. It is believed that there should be a special inquiry into the value of the by-products of meat, and that a fixed system of keeping accounts of storage and other costs on particular commodities should become compulsory. At present these charges are arbitrarily fixed and levied by the different companies. Possibly a legal scale of charges might be established with the system of account-keeping.

The investigation discovered that in 1916 prices in the home market exceeded those in the export market by 1.82 cents per pound of butter, 2.14 cents per pound of cheese, 1.24 cents per pound of beef and 6.11 cents per pound of ham ; but fell below the prices in the export market by 3.76 cents per dozen eggs, 1.08 cents per pound of pork, and 0.48 cents per pound of bacon.

Eggs. -- Table II shows that Company No. 9 sold 5,556,605 dozen eggs at a margin of 7.27 cents a dozen. One branch of this company bought about four million dozen eggs in 1916 at an average cost of 24.8 cents a dozen and sold three and a half million dozen at an average price of 34.7 cents a dozen. In the same year a neighbouring cold storage company bought about 500,000 dozen eggs at 24.4 cents and sold them at 36.3 cents a dozen. If these two abnormal transactions be excluded the average margin of the other eight companies is found to be not 4.3 but 3.6 cents on a dozen eggs. The turnover in the business is so enormous that the investigators considered that this profit was probably still excessive. Of twenty-six million dozen eggs sold by all the cold storage companies of Canada in 1916 the seven large abattoir companies sold seventeen and a half million dozen. The average margin of the ten companies is 4.57 cents ; that of the seven abattoir companies 4.67 cents, or 0.36 cents higher than that of all the cold storage companies, and the latter would be much lower without the contribution of the abattoir companies. Three companies alone sold about fourteen million dozen eggs or about 53 per cent. of the total output of the cold storage companies.

Butter. -- Of the fourty-four million pounds of butter sold in 1916 by

the cold storage companies twenty-nine millions were sold by the ten large companies specified, five and a half millions by one company alone, five by another and four and a half by yet another. The great abattoir houses sold twenty-two out of the forty-four millions. Their general average margin is higher than that of the export houses but lower than that of all the cold-storage companies. Of butter only is this latter circumstance true.

Cheese. — Two companies alone sold over fifty million of the total seventy-two million pounds of cheese sold by all the cold storage companies of Canada in 1916. Forty-nine out of these fifty million pounds were exported. These two companies therefore virtually monopolized the cold storage of cheese for export. Company No. 10, the larger of the two, shows a very moderate profit, much lower than the average for all the cold storage companies of Canada. No. 8, the smaller, shows a lower cost price, and a higher margin due to the larger proportion of its cheese which it sold for home consumption. Some of the more important cheese dealers state that for a short time cheese factories and produce dealers attempted to carry on their own export trade without the intervention of these two companies, but found that they received better remuneration by dealing through them. The average selling price for export of Company No. 10 in 1916 was 18.37 cents a pound and that of No. 8 was 18.96 cents. Another cheese company in the central part of Southern Ontario sold 9,870,064 pounds of cheese in 1916, the bulk for home consumption. Thus three companies sold sixty and a half million pounds of cheese out of the seventy-two and a half million pounds sold by all the cold storage companies in Canada.

Beef. — The centralization of the beef trade in the hands of a few companies is even more marked than that of the trade in eggs and dairy produce. Of the 170 million pounds of beef which passed through cold storage last year 124 million were sold by the seven large abattoir companies, ninety-nine and a half million pounds were sold by three companies only, and nearly 112 million pounds by four companies only. Of the total 189 million pounds bought by all the cold storage companies more than sixty millions were sold by branches of American companies, at a smaller profit than the Canadian houses and almost entirely for consumption in Canada. The margin of the largest company, namely No. 4, is lower than the general margin, but the average margin of the four largest companies taken together is considerably higher than the general margin. This latter circumstance is consistent with what is found in the case of other commodities.

Bacon — Company 9 sold, at a margin of 5.05 cents a pound, ninety-seven millions out of the total 151 million which passed through cold storage in 1915. At least ninety-four out of these ninety-seven millions were intended for export. In 1915 the same company sold fifty-seven and a half million pounds at a margin of 3.67 cents: there was no evidence of an increase in the storage or other costs to account for the rise on this earlier margin which the investigators found to have been "sufficient, satisfactory and profitable". Companies 5 and 9 together sold 140 millions of the 150 million pounds of bacon sold in 1916 by all the cold storage compa

TABLE II.

	Butter				Eggs				Cheese			
	Lbs.	\$	Average cents	Margin cents	Dozens	\$	Average	Margin	Lbs.	\$	Average cents	Margin cents
Company 1 Bought	2,276,126	969,794	29.60	3.18	1,514,340	435,301	28.74	1.82	757,232	148,011	19.54	
" Sold	2,930,864	960,831	32.78		1,383,531	422,837	30.56		654,954	140,955	21.52	1.98
" 2 Bought	5,162,576	1,537,564	29.78	3.06	5,989,121	1,619,852	27.04	3.47	1,819,458	300,374	16.50	2.6
" Sold	5,024,287	1,650,102	32.84		5,966,200	1,799,427	30.51		1,707,056	337,515	19.10	
" 3 Bought	482,705	145,391	30.12	3.23	297,032	77,150	25.97	5.38	74,393	14,255	19.16	1.7
" Sold	449,670	149,979	33.35		244,952	76,794	31.35		76,923	16,048	20.86	
" 4 Bought	4,175,090	1,290,482	30.90	0.92	2,801,035	715,940	25.55	3.95	3,925,154	769,539	19.60	0.36
" Sold	3,899,631	1,241,033	31.82		2,606,199	766,205	29.4		3,788,569	756,390	19.90	
" 5 Bought	2,622,427	797,608	30.41	1.7	1,908,207	500,381	26.22	3.66	517,710	90,608	17.50	1.40
" Sold	2,610,625	838,354	32.11		1,707,115	510,103	29.88		498,464	94,219	18.90	
" 7 Bought	397,048	129,001	34.75	0.09	182,490	51,438	28.18	1.74	226,165	39,896	17.64	less 2.06
" Sold	283,842	98,380	34.66		77,430	23,161	29.92		37,881	5,902	15.58	
" 8 Bought	1,585,192	517,214	32.62	less 0.37	—	—	—	—	16,691,365	2,987,296	17.89	2.55
" Sold	1,605,240	529,671	32.99		—	—	—		15,056,075	3,078,572	20.44	
" 9 Bought	6,083,508	1,890,380	31.07	0.44	6,413,673	1,613,438	25.15	7.27	2,632,618	461,455	17.52	1.15
" Sold	5,547,768	1,748,616	31.51		5,566,505	1,804,948	32.42		2,489,351	464,890	18.67	
" 10 Bought	5,937,366	1,656,708	32.88	0.96	—	—	—	—	37,704,501	6,838,656	18.13	0.28
" Sold	4,541,071	1,536,746	33.84		—	—	—		35,669,173	6,505,617	18.41	
" 11 Bought	1,349,983	442,225	32.75	2.63	1,622,200	429,144	26.46	3.44	581,074	123,319	21.22	2.17
" Sold	1,285,712	454,959	35.38		1,549,889	463,509	29.90		700,495	133,450	19.05	
Total for Abattoirs	22,860,298	6,951,038	30.40	1.79	19,105,898	5,013,500	26.24	4.67	9,933,731	1,831,128	18.4	1.14
Total for Export Houses	21,576,359	6,945,029	32.19		17,481,941	5,403,475	30.91		9,253,098	1,816,318	19.54	
" Bought	8,027,268	2,945,029	32.79	1.11	1,622,200	429,144	26.45	3.46	54,976,930	9,939,271	18.08	0.93
" Sold	7,486,660	2,538,234	33.90		1,549,889	463,510	29.91		51,425,743	9,778,639	19.01	
Total for Export of 10 companies	30,887,506	9,583,197	31.02	1.6	20,728,098	5,442,644	26.25	4.57	64,593,661	11,770,409	18.22	0.87
" Bought	29,063,024	9,482,263	32.62		19,931,830	5,866,985	30.82		60,718,841	11,594,967	19.09	
" Sold	—	—	—		—	—	—		—	—	—	
Total for all Cold Storage Warehouses in Canada	46,561,063	14,358,160	30.83	1.9	28,122,683	7,326,214	26.05	4.31	76,806,324	13,908,000	18.11	0.78
" Bought	43,867,720	14,359,430	32.73		26,410,199	8,018,002	30.36		73,638,890	13,713,053	18.89	
" Sold	—	—	—		—	—	—		—	—	—	

TABLE II (continued).

	Bacon				Ham				Mutton and Lamb			
	Lbs.	\$	Average cents.	Margin cents.	Lbs.	\$	Average cents.	Margin cents.	Lbs.	\$	Average cents.	Margin cents.
Company 1 Bought	95,950	23,888	24.89	1.26	94,550	21,968	23.33	0.96	2,944,992	543,895	18.46	1.0
Sold	100,940	26,042	26.15		96,688	23,477	24.29		2,647,721	510,769	19.46	
2 Bought	—	—	—	—	—	—	—	—	866,281	127,543	14.73	0.66
Sold	—	—	—	—	—	—	—	—	964,228	148,444	15.39	
3 Bought	—	—	—	—	—	—	—	—	169,243	29,135	17.27	1.35
Sold	—	—	—	—	—	—	—	—	107,509	20,024	18.62	
4 Bought	414,056	73,695	17.79		1,267,194	206,071	16.26	2.3	4,585,989	699,791	15.26	1.03
Sold	402,447	85,287	21.19	3.4	1,079,883	200,359	18.56		665,464	162,994	15.29	
5 Bought	—	—	—	—	—	—	—	—	344,781	52,384	15.29	1.62
Sold	—	—	—	—	—	—	—	—	424,877	71,861	16.91	
6 Bought	40,235,557	7,128,476	14.47	3.56	2,845,017	383,816	13.48	6.61	183,492	29,975	16.33	0.38
Sold	42,468,183	7,665,571	18.03		7,657,458	534,062	20.09		176,083	28,094	15.95	0.38
7 Bought	1,554,020	302,607	19.47	1.6	—	—	—	—	—	—	—	—
Sold	1,387,023	292,239	—	—	—	—	—	—	—	—	—	—
8 Bought	—	—	—	—	—	—	—	—	—	—	—	—
Sold	—	—	—	—	—	—	—	—	—	—	—	—
9 Bought	65,397,154	10,681,590	16.35	5.05	1,319,966	196,718	14.90	4.91	2,887,607	468,727	16.23	0.33
Sold	97,791,019	20,929,442	21.40		938,807	185,994	19.81		2,443,729	404,899	16.56	
10 Bought	—	—	—	—	—	—	—	—	—	—	—	—
Sold	—	—	—	—	—	—	—	—	—	—	—	—
11 Bought	5,554,128	1,005,523	18.10	1.37	1,515,761	322,994	21.30	2.03	—	—	—	—
Sold	5,428,620	1,057,206	19.47		1,606,435	374,860	23.33		—	—	—	—
Total for Abattoirs	116,496,737	18,201,256	15.65	4.67	5,526,737	908,573	16.43	3.55	11,982,385	1,951,450	16.29	0.77
Total for Export Houses	142,150,607	28,899,041	20.32		4,772,776	953,862	19.98		10,787,141	1,839,515	17.06	
Total for the 10 companies	5,554,128	1,005,523	18.10	1.37	1,515,761	322,994	21.31	2.02	—	—	—	—
Total for all Cold Storage Warehouses in Canada	5,428,620	1,057,206	19.47		1,606,435	374,860	23.33		—	—	—	—
	121,962,865	19,215,779	15.75	4.54	7,042,498	1,231,567	17.61	3.21	11,982,385	1,951,450	16.29	0.77
	147,579,227	29,956,247	20.29		6,379,211	1,328,722	20.82		10,787,141	1,839,515	17.06	
	125,605,312	19,795,040	15.76	4.58	14,383,485	2,761,676	19.20	2.12	13,609,605	2,286,939	16.8	0.61
	151,399,429	30,787,823	20.34		14,390,367	3,067,809	21.32		12,666,380	2,205,229	17.41	

nies in Canada. In the same year Canada's total export of bacon was, according to the figures of the Trade and Commerce Department, 169 million pounds. Perhaps no country supplying the Allies with food can afford an example of a nearer approach to a monopoly in one commodity. The basis of a monopoly in bacon existed before the war, and the extraordinary conditions ruling since the outbreak of hostilities have enabled its development.

The general expansion of trade due to the war did not bring equal profits to the ten large companies mentioned in Table II. Table III shows approximately the increase in their receipts, from trade in the products covered by the investigation, between 1913 and 1916. By-products, such as hides and lard, are excluded. The disproportionate increase of the profits of Companies Nos. 5 and 10 is largely due to their sales of pork and bacon. Company No. 1, one of the largest dealers in beef in the West, has trebled its sales of beef since 1913.

TABLE III.

Company	1913	1914	1915	1916
No. 1	3,300,000	4,600,000	7,200,000	8,800,000
" 2	4,600,000	4,600,000	7,000,000	9,000,300
" 3	570,000	550,000	600,000	980,000
" 4	12,630,000	14,000,000	14,000,000	16,215,000
" 5	2,500,000	3,500,000	7,000,000	11,900,000
" 8	2,700,000	2,700,000	3,600,000	3,600,000
" 9	4,300,000	8,000,000	18,500,000	28,100,000
" 10	5,300,000	5,600,000	6,700,000	8,100,000
" 11	900,000	1,100,000	1,300,000	2,500,000
" 12	—	—	—	(1) 6,400,064

(1) The records of Company No. 13 for 1913 are not available. The figures representing this company's receipts in 1913 are added because there is at least a partial overlapping of its directorate with that of Company No. 9 and perhaps a closer association of the two companies.

§ 4. GENERAL CONCLUSIONS.

The following are the general conclusions of the investigators under the order-in-council.

The business of the cold storage companies has on the whole been fairly conducted. There has been no illegal combination and no excessive accumulation on the part of any of them.

Individual instances of profiteering occurred during 1916. The profiteering companies as a rule lowered their margins in 1917, after the order-in-council as to the cost of living had come into force, but these margins seem to have remained too high. The question of their justice or injustice cannot however be absolutely determined without either a criminal prosecution or a declaration by the Food Controller as to fair prices or a fair margin.

A tendency has become apparent on the part of a few companies to exact seemingly excessive margins on beef and butter. As to this matter also there cannot be certainty without a prosecution or a declaration of the Food Controller.

The profits of most of the cold storage companies not convicted of profiteering might probably be lessened as regards certain of their lines of trade, although the prices they obtain are not high as compared with those prevalent before the war. The great extension of their business during the war would probably make lessened profits on individual transactions fair.

Any lowering of the margins of the cold storage companies will only go a short way towards reducing prices to the consumer. The profits of the companies were made on their enormous turnovers, their margin per pound or per dozen being comparatively small.

Finally the report of the investigation states that the farmer, the cold storage warehouse, the wholesale produce merchant, the retailer and the consumer, indeed all persons who in any way have come into relation with the commodities covered by this report — including, among a multitude of others, the farm labourers whose wages have been increased, the carter whose charge has risen, the miller whose shorts and bran command higher prices, the employees of wholesalers and retailers whose pay is higher, the consumer who requires delivery on a more expensive system, and who besides is, on his own account as master or employee, a link in a chain causing other high prices which react upon the prices of the commodities covered by this report — all have contributed to produce existing prices. There cannot be peace prices in war conditions.

UNITED STATES.

THE IMPROVEMENT OF CONDITIONS AMONG IMMIGRANTS INTO CALIFORNIA.

OFFICIAL SOURCES:

SECOND ANNUAL REPORT OF THE COMMISSION OF IMMIGRATION AND HOUSING OF CALIFORNIA
2 January 1916. San Francisco, 1916.

IMMIGRANT EDUCATION LEAFLETS. Published by the Commission of Immigration and Housing
of California.

THE HOME TEACHER. THE ACT WITH A WORKING PLAN. Published by the Commission of Im-
migration and Housing of California, San Francisco, 1916.

ADVISORY PAMPHLET ON CAMP SANITATION AND HOUSING. San Francisco, 1916.

REPORT ON UNEMPLOYMENT TO HIS EXCELLENCY GOVERNOR HIRAM W. JOHNSON, BY THE
COMMISSION OF IMMIGRATION AND HOUSING OF CALIFORNIA. 9 December 1914.

REPORT ON RELIEF OF DESTITUTE UNEMPLOYED 1914-1915 TO HIS EXCELLENCY GOVERNOR
HIRAM W. JOHNSON BY THE COMMISSION OF IMMIGRATION AND HOUSING OF CALIFORNIA.
25 June 1915.

On 12 June 1913 the parliament of California approved an Act creat-
ing the Commission of Immigration and Housing.

This commission consists of five persons nominated by the governor
of the State and receiving no payment other than reimbursement of the
necessary expenses they incur while travelling on the commission's business.
The commission has power fully to investigate the condition of immigrants
and the opportunities before them. It gathers information as to agricultural
possibilities and opportunities for settlement on land within the State, and
may therefore make surveys of soil and arable land and collect data as to
price and productivity, and also as to the need and demand of agriculture
for labour. It must co-operate with State and municipal employment bureaux
and private employment agencies, and also with similar federal insti-
tutions and institutions in other States, in order to secure the distribution
and employment of immigrants. It must collect and publish, for distri-
bution among immigrants, such information in English and foreign languages
as is deemed essential to their protection, distribution, education and
welfare. It must co-operate with the proper authorities and organiza-
tions, both public and private, in order to give the immigrant the best
opportunities for acquiring education and citizenship. It may inspect all
labour camps within the State and investigate the housing conditions in
which immigrants live. It is responsible for calling the attention of the
proper authorities to violations, to the detriment of immigrants, of the

laws pertaining to the payment of wages, to employment generally and to housing conditions.

With the aid of the commission's official publications we will shortly examine its efforts in the principal spheres entrusted to it and the results it has hitherto obtained, with particular reference to agricultural labourers.

§ I. IMMIGRATION AND SETTLEMENT.

The commission, while realizing the advisability of directing the tide of immigration towards agriculture in order to hasten development of the land and to lessen the supply of unskilled labour which tends to lower the wages of the working classes, has throughout been aware of the danger, no less great, of recruiting for agriculture among untrained and unfit immigrants without necessary capital. In a recent article (1) we spoke of interior colonization in California and showed the conditions of agriculture in this State and the needs formulated by the commission which investigated them. The new system of land credit, instituted by the law of 17 July 1916, will not fail sooner or later to facilitate the settlement of a part of the floating rural population in that it will give it means of access to the land.

The commission has confined its attention to the improvement of rural conditions and to furnishing general information to all those who are attracted to this country. Indirectly much of its work has tended to make rural life more attractive, especially its effort to secure better housing and sanitation in small towns, on farms and in labour camps, and its educational programme to which we will presently recur. It has taken direct action in two ways, by prosecuting cases of fraudulent sales of land and securing the passage of the Act which forbids dishonest advertising of land, and by arranging to supply information as to agricultural land to prospective purchasers. By the Act in question, which was approved in 1915, a new section was added to the State Penal Code making it a misdemeanour to publish or disseminate any untrue or misleading statement concerning the situation, extent, or any other quality or attribute of real estate situated in this State or elsewhere.

In all, since the Complaint Bureau was founded by the Commission, it has dealt with 7,369 cases; and of the 2,906 complaints received in 1915, 94 were of frauds connected with sales of land.

As regards its supply of information the Commission has made an arrangement with the Division of Agricultural Extension of the University of California, in virtue of which the land experts of the latter department not only furnish general information but also make special reports on particular tracts of land. The following notice, in several languages, is placarded throughout the State. "The Commission... will make an investigation and

(1) *International Review of Agricultural Economics*, September 1917, page 59.

free report to any immigrant concerning any particular tract of land which he may have visited and the purchase of which he is contemplating. This report will include a careful study of the land involved, both from the point of view of its agricultural possibilities and from the point of view of its location as regards marketing possibilities. If an immigrant also states his previous experience, his financial condition, and answers freely other questions put to him, this report will also give specific advice as to the wisdom of taking up the proposed land. Before any immigrant buys or makes any payment on a piece of land he should have a free report on it from the State Commission of Immigration and Housing, 525 Market Street, San Francisco. The Commission's interpreters speak and write all languages."

It is hoped in this way to reach the majority of prospective immigrant purchasers and thus prevent frauds in the sale of lands rather than prosecute for frauds which have already been perpetrated. Hundreds of complaints which reach the Complaint Bureau show that most purchasers of land are sadly in need of expert advice. Even many trained farmers seem unable to judge of soil and of the general agricultural value of land except by actual experience, and certainly immigrants unfamiliar with Californian conditions need advice and assistance. It is felt therefore that this scheme has great possibilities, and the commission hopes next year to report considerable progress in connection with it.

§ 2. LABOUR AND UNEMPLOYMENT.

Section 5 of the Act creating the Commission empowered it "to devise and carry out such suitable methods as will tend to prevent or relieve congestion and obviate unemployment".

The task implied is considerable. The distribution of labour and its utilization in accordance with the workmen's aptitudes and individual qualities is one of the problems most difficult to solve.

The Commission has studied it in relation to the special conditions which prevail in California. In co-operation with the United States Commission on Industrial Relations it has conducted an enquiry within this State under the following headings:

- "a) Study of special localities to show methods of obtaining labour;
- "b) Study of several hundred life histories of migratory and casual workers, to learn causes of unemployment and methods of obtaining jobs;
- "c) Study of available material in United States census, report of United States Immigration Commission, report of State Commissioner of Labour Statistics, reports of labour unions in California;
- "d) Investigation of eighty-one private employment agencies within the State to determine their real status and value".

In December 1914 the Commission presented to the government a re-

port which contained the following among other detailed recommendations :

1) The creation of a State bureau of labour exchanges under a representative board or commission and having branch offices in the centres of population to act as a clearing-house for labour. The bureau should co-operate with the Railway Commission to provide low fares for the labourers it places, and should have authority to regulate private and philanthropic agencies of employment, issuing and revoking licenses to them at pleasure.

2) The enactment of more stringent laws for the regulation of private employment agencies.

3) The appointment of a special committee or some existing commission to conduct an extended investigation into the wisdom of devising a scheme for insurance against unemployment, possible schemes for regularizing and dovetailing private enterprise, and ways and means of undertaking public works during periods of depression.

4) The organization of rural credit on European lines.

5) A State land bureau which would preferably co-operate with the University of California.

Some of these recommendations have already been followed, notably numbers 2, 3 and 4; and as regards number 4, which was also a recommendation of the Commission on Land Colonization whose report we treated in our article already cited, the Commission of Immigration has, as we have seen, succeeded in forming within itself a special organization which constitutes a great improvement on the previous state of affairs.

As regards the problems of agricultural labour they are no more than an aspect of the general agrarian problem in California. Speculation in land has had deplorable consequences. On this subject Colonel Harris Weinstock expressed himself as follows, in an address delivered on 11 November 1914 to the California State Fruit Growers' Convention: "Great fortunes have been expended throughout the nation and elsewhere, inviting people to engage in California horticulture and agriculture, but our methods have been so crude and so unscientific and the love of greed on the part of land promoters has been such that a very great proportion of those who have been induced to come here and to buy our acreage have failed, with great misfortune to themselves and with serious injury to the State. A frightfully large proportion of such investors have come to grief, have been forced back to the cities, many of them as unskilled labourers, to swell the ranks of the casual unemployed...." The Commission would look with favour on legislation which would break up large holdings of unimproved lands and open them up to development and colonization.

In the matter of unemployment the Commission, at the governor's request, laid down for the towns and counties of the State a uniform plan of action, according to which the unemployed executed works of public utility in return for board and lodging. It was an interesting attempt to replace unproductive charity by useful work. In the winter of 1914-1915 more than 100,000 persons profited directly or indirectly by this organization.

§ 3. EDUCATION.

In order to raise the intellectual and moral level of immigrants the Commission has engaged, in accordance with the Act, in a campaign against ignorance. A considerable proportion of the foreign labourers are illiterate. The first efforts were naturally made in the towns where evening schools and classes in civics teach the English language and the rules of political and social life to an increasing number of aliens. An Act approved in April 1915, which had effect from the following 10th of August — the Home Teacher Act — brought education to the women and girls who had previously been neglected. By its terms "home teachers" are appointed "to work in the homes of pupils (of the common schools) instructing children and adults in matters relating to school attendance and preparation therefor; also in sanitation, in the English language, in household duties such as purchase, preparation and use of food and of clothing, and in the fundamental principles of the American system of government and the rights and duties of citizenship".

The educational programme we have outlined is however designed to benefit only the immigrants who live in towns or within reach of rural schools. The thousands who live in labour camps and other isolated places have to be reached in other ways. In the 663 labour camps inspected by the Commission between July 1915 and January 1916 there were 17,140 foreign-born persons of whom only 1,786 or 10.4 per cent. were naturalized citizens. Of their number 4,371 spoke no English. Instruction was offered in only $\frac{7}{10}$ per cent. of the camps and only 36 per cent. of them were within a mile of a public school. Attendance at a night school more than a mile away can hardly be expected of tired working men. The data collected in labour camps in the past two years show that, at a conservative estimate, some 75,000 people live in them either all the year round or for a considerable part of each year.

The Commission found that it was absolutely necessary to provide schooling for some 5,000 children in the labour camps. A system of correspondence courses for adults has been mapped out, with a view to allowing migratory workers to pursue their courses as they pass from camp to camp; and it has been planned that an instructor shall visit the larger camps at regular intervals in order to give personal teaching and keep alive the interest in self-education.

§ 4. STATISTICS AS TO LABOUR CAMPS AND THEIR SANITARY CONDITION.

The labour camps of California are for agricultural labourers and lumbermen and for industrial workers. To the former of these two categories belong persons employed on 1) beetroot cultivation, 2) fruit growing, 3) in vineyards, 4) in hop-yards, 5) in woods, and 6) on ranches. As regards the numbers of residents of camps thus severally employed the Commis-

sion found that in the 663 camps it inspected between 1 July 1915 and 1 January 1916 there were working on

beetroot fields	1,758	persons (men, women and children)
fruit farms	1,151	
vineyards	69	
hop plantations	6,857	
lumber	10,221	
ranches	775	

or a total of 20,831 agricultural labourers and lumbermen as against a total of 19,610 inhabitants of the various industrial camps. In the absence of precise data as to all the camps, of which there are more than a thousand, it may be concluded that their population is fairly evenly divided between the agricultural and the industrial classes. About 21 per cent. of the total population of the inspected camps is made up of 4,596 women and 4,064 children, a circumstance which makes more urgent the hygienic measures prescribed by the Commission. Women were found in 380 camps, as earners in 196. Of the women at work 1,769 were employed on hop picking and jam making, the others in the beetroot fields, as cooks or on other domestic work. Of the total employed population 9,405 persons were skilled and 24,258 unskilled labourers. On this point data for 36 camps are lacking. More than 70 per cent. of the skilled labourers were employed in mines and quarries, on oilfields and on lumber works. In agricultural camps the percentage of skilled labour was very small. It was 8.4 per cent. in the beetroot fields, 13.5 per cent. in the fruit plantations, 0.2 per cent. in the hopyards, and 10.7 per cent. on the ranches. Among the lumbermen it was as much as 43.4 per cent. Of 36,264 adult labourers 6,948 or about 19 per cent., including 3,376 skilled labourers, were married. In other words 35.8 per cent. of the skilled labourers were married while only 14.7 per cent. of the others had charge of a family. It is further interesting to note that the comparatively permanent work of the oilfields employed men of whom 40.5 per cent. were married, while in the other camps less than 10 per cent. of the residents were married.

In 1913 an Act was passed for the improvement of the sanitary condition of labour camps. Its enforcement was entrusted to the State Board of Health, which delegated such task to the Commission of Immigration. On 8 August 1915 the amended Labour Camp Sanitation Act became effective and the State Board's power of enforcement was transferred to the Commission. In applying the law the Commission took into account the fact that the data it had collected up to 1 January 1915 showed more than half the residents of Labour Camps to be immigrants.

The inspection of the labour camps had shown that the condition of many of them was insanitary. The Commission endeavours to bring about improvement through friendly co-operation between employers and employed. So far it has not been necessary to resort to the courts to secure com-

pliance with the laws, and threats of a prosecution, to be made failing the execution of improvements within a fixed time, have been few but effective. An educational pamphlet on camp sanitation and on housing has been published and placards on the same subject have been placed in the camps. The amendements of the Labour Camp Sanitation Act passed by the legislature of 1915 practically brought the legal standard of living condition up to the level of that advised in the pamphlet. They were as follows :

" 1) Mess houses, kitchens and dining tents must be kept in a sanitary state and all openings must be screened (against flies) ;

" 2) Adequate and convenient toilet facilities must be provided — latrines or privies must have pits of certain depth, lime or ashes must be used as disinfectants, and all openings must be screened ;

" 3) Garbage and rubbish must be deposited in sanitary, covered receptacles which must be emptied daily, and the contents disposed of by a sanitary method ;

" 4) The Commission of Immigration and Housing of California shall enforce the Act, and have the power to inspect all camps to secure compliance with the above new provisions, and also with the sections of the Act dealing with adequate sleeping facilities, general sanitation, cleanliness, etc. "

The Commission has supplied detailed plans of bath-houses for men and women in the camps and of refuse incinerators, and instructions for sinking and managing wells, for making portable latrines and for making clean, airy and fly-proof kitchens and mess-houses. It has laid down the precautions to be taken against mosquitoes where there is stagnant water, the necessity of depositing refuse at a distance from kitchens, and the precautions to be taken against the contamination of drinking water, etc. It has been supported by the Bureau of Sanitary Engineering which was created in 1915 and which deals with all the technical problems of sanitation which formerly fell to the Commission's engineer.

It is estimated that 46 per cent. of the camps inspected in 1915 might be classed as " good ", 35 per cent. as " fair ", and 19 per cent. as " bad ". This shows an increase of 12.1 on the percentage of " good " camps in 1914 and a decrease of 11 per cent. on that of " bad " camps. Moreover 51.3 per cent. of the labourers were lodged in " good " camps in 1915 as compared with 35.5 per cent. in 1914. It is evident therefore that there is on the whole a response in the larger camps to the Commission's efforts.

Facilities for bathing existed in only 420 of the 663 camps inspected. It was found that in only two of these 420 camps did the men use the baths less often than once a week : in 208 they used them daily and in 123 weekly.

No latrines were provided in 52 camps, but this indicates an improvement on 1914 when there were none in 114 out of 876 camps.

Precautions against flies in mess-houses and kitchens are harder to teach but there has been a noticeable improvement in this direction.

As regards sleeping accommodation 22 per cent. of the camps entirely failed to satisfy the requirements of the Commission in this respect. In 34 per cent. of them there were no floors in the bunk-houses or sleeping

tents. In ten camps there were no bunks and the men had to sleep on the ground.

As regards the nationality of the labourers 7.06 per cent. of the immigrants in the 663 camps inspected were Mexicans, 11.40 were Italians, 4.76 were Japanese, 3.16 were Spaniards, 2.65 were Portuguese and 2.34 were Greeks.

The work accomplished by the Commission of Immigration and Housing was summarized by Governor Hiram W. Johnson in his message to the Californian legislature in 1915. "The labour camps of the State of California were in many cases unfit for human habitation. The Commission of Immigration and Housing undertook a systematic inspection of these camps. Hundreds of them it has cleaned up and rendered sanitary. For more than 60,000 human beings the Commission has provided better and more sanitary places in which to live, and for this great work, so well performed, the Commission has the thanks not only of those who were unable to aid themselves and have benefited, but of the State at large".

GREAT BRITAIN AND IRELAND.

FURTHER PROVISIONS OF THE CORN PRODUCTION ACT 1917.

OFFICIAL SOURCE :

JOURNAL OF THE DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,
Vol. XVII, No. 3, Dublin, April 1917.

In our issue for last October we explained the Corn Production Act 1917 as it affects the wages of agricultural labourers and restricts the raising of agricultural rents in England and Wales. We purpose now to state what are the further provisions of this law.

§ 1. MINIMUM PRICE OF WHEAT AND OATS.

A farmer who is compelled to pay a minimum wage to the labourers he employs may find that he is in consequence tilling his land at a loss if the sum of the wages and the rent he pays be disproportionate to the price at which he sells his crops. In such case he has a legitimate grievance ; and therefore the Act not only, as we explained in our previous article, protects him against an unfair increase of his rent, but also guarantees to him a minimum price for his wheat and oats.

The *guarantee* is afforded by the first clause of Part I of the Act which states that " if the average price for the wheat or oats of any year for which a minimum price is fixed under this Act... is less than the minimum price as fixed by this Act, the occupier of any land on which wheat or oats have been produced for that year shall be entitled to be paid by the Board of Agriculture and Fisheries in respect of each quarter of wheat or oats which he proves to the satisfaction of the board to have been so produced and to have been sold, a sum equal to the difference between the average price and the minimum price per quarter ".

The minimum prices are fixed as follows :

Crop for Year	Wheat, price per quarter	Oats, price per quarter
1917	60s.	38s. 6d.
1918	55s.	32s.
1919		
1920	45s.	24s.
1921		
1922		

The *average price* for the wheat or oats of any year is defined as the average price for the seven months beginning on the first day of September, and is to be calculated from all the weekly averages for those months. Such weekly average prices of wheat and oats are to be ascertained in accordance with the Corn Returns Act, 1882. The Board of Agriculture and Fisheries will, as soon as possible after the end of March in any year, cause the average price of wheat and oats for the preceding year to be published in the "London Gazette".

The *occupier* of any land is defined for the purposes of the Act as the person who occupies on the first day of September in any year the land on which the grain in question is in that year produced.

No *payments* under this part of the Act in respect of any wheat or oats sold will be made unless the Board of Agriculture be convinced that the grain has been delivered in pursuance of the sale. All claims for such payments must be made to the board which will solely and finally determine with respect to them. Any person making a false statement or representation in order to obtain such a payment is liable on summary conviction to imprisonment with or without hard labour for a term not exceeding six months.

§ 2. POWER TO ENFORCE PROPER CULTIVATION.

The provisions in the first three parts of the Act as to minimum wages, rents and minimum prices seek to ensure that farming is profitable to the farmer. The fourth part of the Act is directed against the farmer to whose activity the guarantee of a fair profit is not a sufficient stimulus.

The Board of Agriculture and Fisheries may, if they consider that any land is not being cultivated to the best interests of the country, serve a notice on the occupier requiring him to cultivate it in accordance with their directions. If he fail to do this, the board may, if he be owner of the land, enter on it and take any steps they think necessary for its adaptation or cultivation, all for such time as they think fit. If the recalcitrant occupier be a tenant the board may make such order as they deem to be necessary, either authorizing the landlord to determine the tenancy as they require, or themselves determining the tenancy, or directing that the tenancy be continued but that any covenant or condition of the contract thereof which seems to them to interfere with the required cultivation of the land be suspended. Any such order of the board will have effect as though it were contained in the contract of tenancy. It may include provisions adjusting the relations between tenant and landlord where tenancy is determined, or securing payments or other benefits to the landlord where tenancy is suspended.

No penalty in the shape of an increase of rent or otherwise will be incurred by a tenant, whatever be his contract of tenancy, for any action which the board certify that he has taken reasonably in order to carry out their directions.

On withdrawing from possession of land on which they have entered

under this section of the Act the board may recover from the person then entitled to resume its occupation the value of the works of cultivation and adaptation which they have executed ; and such person will be entitled to receive from them compensation for any direct or substantial loss which he has incurred in consequence of their action. The amount payable in either case will, in default of agreement between those concerned, be determined by a single arbitrator in accordance with the Agricultural Holdings Act, 1908. If the disputing parties do not agree upon an arbitrator he will be nominated by the President of the Surveyors' Institution.

The Board of Agriculture and Fisheries may authorize any person or body of persons to exercise on their behalf any of their powers to enforce proper cultivation of land, or they may constitute a body to do so in conditions which they will prescribe.

§ 3. SPECIAL PROVISIONS FOR SCOTLAND AND IRELAND.

The Corn Production Act, 1917, is applicable to *Scotland* with the following modifications :

a) The Board of Agriculture for Scotland is substituted for the Board of Agriculture and Fisheries.

b) A separate Agricultural Wages Board is established for Scotland and substituted for the Agricultural Wages Board.

c) The Agricultural Holdings (Scotland) Act, 1908, is substituted for the Agricultural Holdings Act, 1908.

d) The Chairman of the Scottish Committee of the Surveyors' Institution is substituted for the President of the Surveyors' Institution.

e) The " *Edinburgh Gazette* " is substituted for the " *London Gazette* ".

To *Ireland* the Act is applied with the following modifications :

a) The powers and duties of the Board of Agriculture and Fisheries will be exercised and performed by the Lord Lieutenant or by or through such departments and bodies as he may determine.

b) A separate Agricultural Wages Board is established for Ireland and substituted for the Agricultural Wages Board ; but the powers of the latter board to fix minimum rates of wages shall be exercised by the Lord Lieutenant on the advice of the separate board for Ireland. For all references in the Act to the rate of at least 25s. a week references to an adequate rate are substituted. The provisions of the Act as to the retrospective effect of a minimum rate of wages for able-bodied men do not apply to Ireland.

c) The provisions of the Act as to the constitution of the Agricultural Wages Board and District Wages Committees do not apply to Ireland. This exception is due to the fact that the Irish members of the Agricultural Sub-Committee, on whose report the Act was based, were appointed at a later date than the English and Scottish members, and therefore it was impossible for the committee to give adequate attention to the special circumstances of Ireland which bear on the question of Wages Boards.

d) The provisions of the Act which restrict the raising of agricultural rents do not apply to Ireland, where agrarian conditions are so diverse from those in Great Britain that they would not be appropriate.

e) The amounts payable by or to an occupier who has been superseded, under this Act, for failure to cultivate his land as directed, will be determined in Ireland, in default of agreement, in accordance with the provisions of the Landlord and Tenant Act, 1870. The Lord Lieutenant in Council may further modify the provisions of the Act as to the enforcement of proper cultivation for the purpose of adapting them to schemes of tillage or systems of tenure in force in Ireland.

f) The "Dublin Gazette" is substituted for the "London Gazette"

§ 4. GENERAL CONSIDERATIONS UNDERLYING THE ACT.

In the foregoing paragraphs and in the article in our October number we have outlined all the main provisions of the Corn Production Act, 1917. They are an attempt to deal with a problem which has arisen in the course of two hundred years: in the beginning of the eighteenth century the United Kingdom produced enough wheat to make bread for its own population; in the beginning of the twentieth century it imported four fifths of the wheat it consumed. This dependence on imports has increased the cost of the war, aggravated the difficult problem of regulating foreign exchange, and absorbed an undue portion of the tonnage of the merchant navy when this has been sorely needed for other purposes. These facts led to the appointment in 1916 of a Sub-Committee of the Reconstruction Committee to consider the need of increasing home-grown supplies of food in the interest of national security and to report upon the methods of effecting such increase. The committee's report resulted in the Act we have examined.

The committee gave it as their opinion that the adoption of such an agricultural policy as the Act implies will lead to the production within the United Kingdom of much of the food that is now imported. They did not indeed claim that it is possible to grow at home enough food for the whole British population — for that there are in our islands too many mouths and too few acres; but they considered that food production can be enormously increased by better tillage and more farming. They believed moreover that the production of cereals can be largely increased not only without diminishing but even while increasing the production of meat and milk.

The Act is explicitly temporary: it is to continue in force only until 1922 unless Parliament make provision for its prolongation. The committee recommended that prices comparable with those which ruled during the war should be guaranteed for two years after peace had been declared. They did this especially in view of the necessity of inducing farmers to break up grass land and bring it under the plough. Only the sure prospect of a profit which would continue would reconcile many of them to expending money and labour on this undertaking.

The Act meets the recommendation of the committee by its provision of a six years' guarantee.

The Committee looked beyond the war. They stated that after peace has been declared the financial and physical welfare of the country will demand the fullest possible development of the capacity of the soil. Burdened with a huge debt the nation will be strongly interested in producing as much as possible of its food and importing as little as possible. Exhausted in man-power it will find in the expansion of the rural population of its islands the best restorative of its vital and creative energy.

Two recommendations of the committee have not been reflected in the Act. In the first place they gave it as their opinion that there can be no satisfactory development of agriculture while the demand for good cottages for agricultural labourers remains unsatisfied. The provision of cottages should be undertaken without a moment's avoidable delay after the war.

Secondly the committee recognized that the State ought to place at the disposal of farmers the best available scientific and practical advice. They declared indeed that it was essential to their scheme that the present opportunities for agricultural education, technical advice and research should be developed. There must be insistence on the importance of drainage, demonstrations of the best means of converting grass to arable land and of manuring, demonstrations as to the best varieties of seed, and in general as to methods of increasing production without loss of profit.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL

GREAT BRITAIN AND IRELAND.

WAGES BOARDS IN ENGLAND AND WALES. — *The Journal of Agriculture*, Vol. XXIV,
No. 7, London, October 1917.

In pursuance of the Corn Production Act 1917 (1) the Board of Agriculture and Fisheries issued on the 28th of last September provisional regulations, to have immediate force, with respect to the constitution and proceedings of the Agricultural Wages Board for England and Wales, shortly to be appointed.

In addition to the Central Wages Board, District Wages Committees will be set up throughout England and Wales, each comprising an equal number of representatives of employers and workers, respectively, and also one or more impartial persons appointed by the Board of Agriculture and Fisheries. These Committees will have to make recommendations to the Central Board as to the rates of wages applicable to their districts.

As will be observed from the provisional regulations the representative members on the Central Board will be partly elected by organizations representing farmers and labourers, respectively, and partly nominated by the Board of Agriculture and Fisheries.

The President will be glad to receive and consider suggested names of representatives of employers, submitted by farmers' organizations, or by groups of at least ten farmers, and of representatives of workers, submitted by labourers' organizations, or by groups of at least ten agricultural labourers. From among the persons so suggested nominated representative members of the Central Board and of the District Committees will be selected. Members of the Central Board and of District Committees will be entitled to an allowance in respect of out-of-pocket expenses.

The Provisional Regulations are as follows :

" 1. An Agricultural Wages Board shall be established for England and Wales consisting of 39 persons, of whom seven shall be appointed members and the remainder representative members. The representative members shall be members representing employers and workmen, respectively, in equal proportions.

" 2. The Chairman and Deputy Chairman shall be appointed by the Board of Agriculture and Fisheries from among the members of the Wages Board, and each of them shall (provided that he continues to be a member of the Wages Board) hold office for such period as the Board of Agriculture and Fisheries may determine.

" 3. The appointed members shall be such persons as may be selected

(1) For this Act see the preceding article and article on pages 67 to 71 of our issue for October 1917.

by the Board of Agriculture and Fisheries to act on the Wages Board, provided that at least one shall be a woman.

" 4. The selection and appointment of representative members shall, subject to the provisions of paragraph 5 of these regulations, be as follows :

" Of the members representing employers, eight shall be elected as follows :

2 representatives by the council of the Royal Agricultural Society of England.

2 representatives by the general executive committee of the National Farmers' Union.

2 representatives by the council of the Central and Associated Chambers of Agriculture.

2 representatives by the Welsh Agricultural Council.

" Eight members representing employers shall be nominated by the Board of Agriculture and Fisheries, after due consideration of any names which may be submitted by agricultural associations or otherwise, and after such local enquiries as the President of the Board may deem desirable.

" Of the members representing workmen six shall be elected by the executive committee of the National Agricultural Labourers' and Rural Workers' Union and two by the general executive committee of the Workers Union. Eight members representing workmen shall be nominated by the Board of Agriculture and Fisheries, after consultation with the Ministry of Labour, and after due consideration of any names submitted by workmen and their representative.

" 5. In the election and nomination of representative members, regard shall be had so far as practicable to securing on the Wages Board a fair representation of all classes of farming, and of the various conditions of employment in agriculture in all parts of the country. Where, as the result of any elections under the provisions of paragraph 4, such fair representation cannot, in the opinion of the Board of Agriculture and Fisheries, be secured on the Wages Board, the Board of Agriculture and Fisheries may, in addition to the persons nominated by them under paragraph 4, nominate a representative member in place of any person so elected.

" 6. The Board of Agriculture and Fisheries may, notwithstanding the provisions of paragraph 1, if they think it necessary to secure the proper representation of any classes of employers or workmen, after giving the Wages Board an opportunity to be heard, nominate additional representative members of the Wages Board to serve for such period, not exceeding three years, as may be determined by the Board of Agriculture and Fisheries. The number of such additional representative members shall always be an even number, not exceeding four in all, of whom half shall be representatives of employers and half shall be representatives of workmen.

" 7. Any member representing employers who becomes a workman in agriculture shall vacate his seat. Any member representing workmen who becomes an employer in agriculture shall vacate his seat. The question of fact shall in each case be determined by the Board of Agriculture and Fisheries.

" 8. Any representative member who, in the opinion of the Board of Agriculture and Fisheries, fails without reasonable cause to attend one half of the total number of meetings in a calendar year shall vacate his seat.

" 9. If in the opinion of the Board of Agriculture and Fisheries any representative member shall be incapable of acting as a member of the Wages Board, the Board of Agriculture and Fisheries may determine his appointment and he shall thereupon vacate his seat.

" 10. At the end of one year from the date of the establishment of the Wages Board five representative members to be chosen by lot from among the members representing employers and five representative members to be chosen by lot from among the members representing workmen (in each case excluding additional representative members nominated under paragraph 6 of these Regulations) shall retire from the Wages Board.

" 11. At the end of two years from the date of the establishment of the Wages Board five representative members to be chosen by lot from among the members representing employers and five representative members to be chosen by lot from among the members representing workmen (in each case excluding additional representative members nominated under paragraph 6 of these regulations and excluding members filling the vacancies created by the operation of paragraph 10) shall retire from the Wages Board.

" 12. The term of office of an appointed member shall be two years, and, subject to the provisions of paragraphs 6, 7, 8, 9, 10 and 11, the term of office of a representative member shall be three years, provided that —

(a) A member appointed to fill a casual vacancy shall sit only for the unexpired portion of the term of office of his predecessor ; and

(b) A seat rendered vacant by effluxion of time shall, in the event of delay occurring in filling it, be temporarily occupied by the retiring member until a successor is appointed.

" 13. Any person vacating his seat on the Wages Board under any of the preceding paragraphs or for any other reason otherwise than under paragraph 9 of these Regulations shall be eligible to be reappointed as a member of the Wages Board.

" 14. A vacancy among representatives members shall be filled in the same manner as in the case of the original appointment to the vacated seat.

" 15. Every member of the Wages Board shall have one vote. If at any meeting of the Board the number of members present representing employers and workmen, respectively, is unequal, it shall be open to the side which is in the majority to arrange that one or more of their members shall refrain from voting, so as to preserve equality. Failing such an arrangement, the Chairman, or, in his absence, the Deputy Chairman, may, if he thinks it desirable, adjourn the voting on any question to another meeting of the Board. The Chairman, or, in his absence, the Deputy Chairman shall, in the event of an equal division, have a second or casting vote.

" 16. The expressions "agriculture" and "workmen" in the regulations shall have the meanings given in the Corn Production, Act 1917 (1).

(1) See the article already cited in our issue for last October.

" 17. The Wages Board shall be known under the title of "The Agricultural Wages Board (England and Wales) ".

" 18. Any question upon the construction or interpretation of these Regulations shall in the event of dispute be referred to the Board of Agriculture and Fisheries for decision ".

RUSSIA.

FOOD CONTROL COMMITTEES. — *The Russian Co-operator*, Vol. I, No 10, London, September 1917.

The problem of the food supply is one of the heaviest legacies of the old regime to the revolutionary government of Russia. The provisional government was no sooner formed than it set itself to regulate the supply, transport and distribution of food and other primary necessities.

Some help was afforded by spontaneous action on the part of the people. In the early days of the revolution local conferences on the food question were convoked practically all over Russia, and the conferences formed local food boards. The composition both of conferences and of boards varied from place to place but as a rule their leading members were local co-operators. In many cases, even when a conference had not been summoned, the managing committees of local consumers' societies or of the unions of these were entrusted with the duties of food boards. Thus a nucleus existed for the organization which the central government called into being.

The Organization of the Committees. — The central government published its regulations as to this organization at the same time as it introduced the grain monopoly. These regulations set up all over the country a network of local food committees, of which the members are elected and represent all groups and classes of the population. The element of co-ordination is provided by the rule that the committees include representatives of the National Food Council, deputed by the latter, and also representatives of such other government departments as the War Office, the Home Office, and the Ministries of Railways, Finance, Trade and Agriculture. The Committees may co-opt experts but these can act only in a consultative capacity.

There are provincial, town and district committees. The members of the committee of a province are elected by the provincial zemstvo and municipalities, the councils of workmen's and soldiers' delegates, the local trade unions, local councils of the peasants' union, the co-operative societies and local agricultural societies, and the local trade organizations called committees of exchange. Of the thirty-five to forty members of a provincial committee only three represent trade, six represent the co-operative societies and from three to five the agricultural societies.

The town committees have a more or less similar composition but include also members elected by the employees of the municipalities.

The district committees include representatives of the employees of the district zemstvos. The rural district committees are composed en-

tirely of representatives of producers and consumers, being elected by the peasants, the working-class organizations, the co-operative societies and the local employees of the rural zemstvos.

Each committee elects its own chairman. The chairman of a provincial committee acts as local representative of the Ministry of Agriculture.

The Duties of the Committees. — The committees have the full local control of the food supply, and are charged to carry out the orders of the Central Council, acting through the Ministry of Agriculture, and to promote agricultural production and secure as far as possible a supply of the necessities of life within their respective areas.

In order to fulfil these duties a provincial committee may take a census of available food supplies, issue regulations for the delivery and storage of grain, requisition supplies, fix prices and regulate the distribution of food. A town or district committee acts on the instructions of a provincial committee and shares its functions. A rural district committee has the further right to take a census of the rural population, of the area under crops and of the available stock of cattle; and it must organize the collecting, receiving and forwarding of food supplies.

The committees appoint from among their members their own executives (*uprava*), saving that two members of the executive of each committee are appointed by the executive of the local authority. Co-ordination with the latter is thus secured.

The Part of Co-operative Societies. — According to special instructions issued by the Ministry of Agriculture, co-operative societies are preferred as purchasers of food, both for the army and for the civil population, to other organizations and to private persons. Co-operative credit unions are especially recommended as purchasers of food because they have considerable means of their own and a solid economic organization.

In practice the executives of food committees follow these recommendations. They use the capital of the credit unions to finance their purchases; they frequently entrust all their purchases to these unions; and they make extensive use of their warehouses for grain. They entrust the task of distributing the bought food among the population to the local consumers' societies.

In the province of Nijni-Novgorod, for instance, the local food committees have suffered the Nijni-Novgorod Union of Small Credit Institutions to buy and store food for them, and have made the same union responsible for supplying to the population tools and metal needed for the repair of agricultural machinery, for repairing such machinery in its own workshops, for buying it and for distributing it to the population. All this enterprise is financed entirely by the union, which places its stores and employees at the service of the food committees.

UNITED STATES.

FEDERAL FOOD CONTROL ACT.

This elaborate war measure was signed by President Wilson on 10 August. Its object is expressed in the opening section as "to assure an adequate

supply and equitable distribution, and to facilitate the movement of foods, feeds, fuel including fuel oil and natural gas, and fertilizer ingredients, tools, utensils, implements, machinery, and equipment required for the actual production of foods, feeds and fuel, hereafter in this Act called necessities; to prevent, locally or generally, scarcity, monopolization, hoarding, injurious speculation, manipulations, and private controls, affecting such supply, distribution, and movement; and to establish and maintain governmental control of such necessities during the war."

The Act confers greatly extended powers upon the president during the existence of a state of war and imposes drastic penalties for violation of its provisions. Many of these powers deal with the control and distribution of food as well as a number of other commodities. In administering the Act, the president is authorized to use any department or agency of the government, as well as to establish and work with other agencies. The enforcement of the provisions relating to the control and distribution of foods has been entrusted by him to a Food Administrator.

Among practices specifically prohibited in the Act are the wilful destruction of necessities for the purpose of enhancing price or restricting supply, any conspiring to restrict their production or manufacture for the same purposes, and the holding of or the attempt to monopolize necessities as defined in the Act. A system of licensing various operations is authorized when it is deemed essential, and the president in certain conditions may seize factories, packing-houses, or other plants and operate them. He may requisition food, fodder, fuel and other supplies needed by the army or navy, and may purchase, store, and sell to the public wheat, flour, meal, beans and potatoes, as well as procure nitrate of soda to sell at cost price if the emergency requires it and it is possible to secure the material. In an emergency requiring the stimulation of wheat production, he may fix a minimum guaranteed price. For the crop of 1918 this guarantee is made absolute until 1 May 1919, and is fixed at not less than \$ 2.00 per bushel for No. 1 northern spring wheat or its equivalent at the principal home markets.

The use of foods, fruits, food materials, or fodder for the production of distilled spirits as beverages is prohibited after 8 September 1917. The president is also empowered to restrict or prohibit the use of these materials for the production of malt or vinous liquors if this be deemed essential to the food supply or national security and defence.

An appropriation of \$ 152,500,000 is provided for the enforcement of the Act, with additional \$10,000,000 for the purchase of nitrate of soda.

RUGGERI ALFREDO, gerente responsable.

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